

# MARINE RECORD

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## LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all genera questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

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**A COMPLETE UNDERSTANDING NECESSARY BETWEEN THE UNITED STATES AND CANADA, SAYS GEO. Y. WISNER, C. E., DETROIT—DANGEROUS PRECEDENTS SHOULD BE AVOIDED—GOVERNMENT AUTHORIZATION.**

DETROIT, MICH., Aug. 9, 1899.

### THE MARINE RECORD:

I beg to acknowledge receipt of your letter of August 4th inclosing a copy of Mr. F. J. Firth's article relative to lake levels. There can be no question as to the soundness of Mr. Firth's statement that there should be a complete understanding between the United States and Canada in regard to the use of water, either by the respective governments or by private enterprises along the waterways between the two countries. While it is true that the effect of the Chicago drainage canal will be small compared with that due to natural causes, it is also true that to change the volume of flow through lake waterways without the mutual consent of both governments may be a dangerous precedent to establish.

If the respective governments have a right to authorize the construction of works which will affect the lake levels a few inches, may not such action lead to much greater changes of level being made in the future? With an international commission to consider these matters there need be no difficulty in maintaining the lake levels with regulating works, and at the same time allowing the use of all the water needed for sanitary canals and manufacturing enterprises.

The prosperity of our lake cities is largely due to the easy and economical transportation through the lake waterways, and while any deterioration of these routes is of the greatest importance to the transportation interests, the commercial welfare of the lake cities is equally so.

The commercial growth of the lake cities means increased business for transportation lines, and any policy which may be adopted relative to the lake waterways which is not in harmony with the interests of the cities and manufacturing enterprises, as well as those of transportation, is bound to be injurious. Yours truly,

GEO. Y. WISNER.

ONE of the oldest bridges in Europe is soon to disappear, under the demand for better navigation of the river it spans. This is the stone bridge, with 15 arches, and a total length of 994 feet, built across the Danube at Regensburg (Ratisbon), in Bavaria, by Duke Henry the Superb, in 1135-46.

### THE INTERNATIONAL COMMISSION—SUGGESTION TO MAINTAIN LAKE LEVELS ENDORSED BY MAJOR SYMONS, CORPS OF ENGINEERS, U. S. ARMY—OTHER IMPORTANT POINTS BROUGHT FORWARD.

UNITED STATES ENGINEER OFFICE, Buffalo, N. Y., Aug. 3, 1899.

#### THE MARINE RECORD:

Your letter enclosing copy of Mr. Firth's article, has been received, and in reply to your request for my opinion in regard to the scheme for protecting the lakes as outlined by Mr. Firth, I beg to state that it meets with my most hearty approval.

Some little time ago I was a member of a Board of Engineers which had under consideration an important matter at the Sault Ste. Marie. This board recommended that the matter be referred to an international board, as the United States and Canada were and are both interested in it. It occurred to me at the time that this international board, if established, could, and probably would be perpetuated, and its duties enlarged, to cover all the ground and consider the questions mentioned by Mr. Firth, and any others which might come up in the future.

The Great Lakes and their connecting waters can not properly be divided up into several districts and questions in each district be considered separately and independently. Every question, except such as are unequivocally and entirely of a local character, should be considered in its relation to the whole lake system. This would naturally require a central board having a comprehensive grasp of, and familiarity with, the entire system of waters. And as all such matters would interest Canada as well as the United States, such a board should properly be international.

It is quite strange when one thinks of it, that, considering the magnitude of the navigation and allied interests on the lakes, the grave questions connected with the Chicago drainage canal, with the deflection of water for power purposes at the "Soo," the changes in interlake channels, the problems involved in the regulation of lake levels, the proposed canal from Lake St. Clair to Lake Erie, and the lighting and buoying of international channels, as well as other matters, there never has been organized a central international board to whom such subjects could be referred. I am convinced that such a board, if properly organized and given a fair degree of permanence with sufficient funds to enable it to carry on any necessary investigations, collect data, etc., would be of great value to all interests centering about the lakes. There are some questions connected with such a board that might be open to discussion. What should be the relative weight of representation of the two countries on such a board, and how should the expenses be divided?

Very truly yours,

THOMAS W. SYMONS,  
Major, Corps of Engineers.

### INSTITUTION OF NAVAL ARCHITECTS.

The following papers were read at the July meeting of the Institution of Naval Architects (British). "The Rise and Progress of Rifled Naval Artillery," by Sir Andrew Noble, K. C. B.; "The Distribution of Pressure over the Bottom of a Ship in Dry Dock and over the Dock Blocks," by Dr. Francis Elgar; "A new System of Forced Draught," by Mr. Nelson Foley; "Elswick Cruisers," by Mr. Philip Watts; "The Boiler Arrangements of certain Recent Cruisers," by Mr. F. T. Marshall; "Ice-Breakers," by Col. H. F. Swan; "Some Experiments having Reference to the Durability of Water-Tube Boilers," by Mr. A. F. Yarrow; and "Large Atlantic Cargo Steamers," by Mr. G. B. Hunter. Interesting discussions followed the reading of the various papers.

### QUARTERLY RETURNS—VESSELS LOST.

Lloyd's returns of vessels totally lost, condemned, etc., during the quarter ending December 31, 1898, shows 103 steamers of 141,596 tons gross, and 311 sailing vessels of 121,342 tons gross, to have been totally lost, condemned, etc., in the period named. Taking the statistics for each country and combining steam and sailing tonnage, we find 71 British ships, equal to 69 per cent. of the tonnage owned, are accounted for in the returns. In regard to tonnage owned, the Germans were most fortunate, their 16 ships lost equaling only .31 per cent. of the total tonnage. At the other end of the scale, the United States seemed to be the heaviest loser with 101 vessels of 53,279 tons, making 3.21 per cent. of the vessels owned and 2.18 of our tonnage, and, in these figures vessels under 100 tons are not included in the returns. Sweden, however, was proportionately the heaviest loser, her 40 ships lost, condemned, etc., representing 2.69 per cent. of her total tonnage. The Norwegian losses were also heavy, including as they did 71 ships, and 1.94 per cent. of their tonnage. The Danish losses were 7 ships and 1.43 per cent. of the Danish owned tonnage. The French losses figure at 14 ships and .55 per cent. of the tonnage owned, from which we see that the Scandinavian sailors manage to lose a larger proportion of their tonnage than do the British, French and German seamen.

### TONNAGE OF SEAGOING VESSELS.

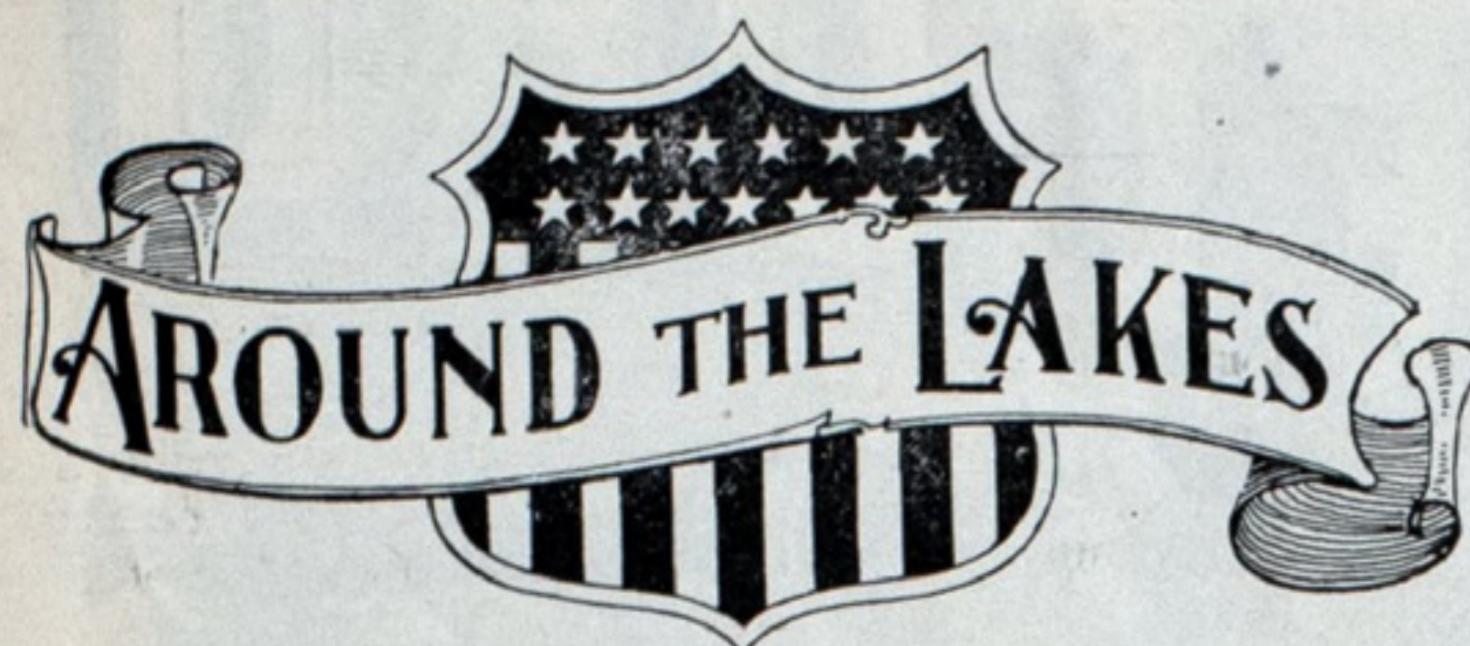
The latest table showing the tonnage of seagoing vessels now in course of construction in the principal countries, brings the figures down to June 30, 1899. The showing is as follows:

	Steamers, reg. tons.	Sailing ves., reg. tons.
Great Britain.....	1,386,300	1,700
Germany.....	198,780	1,520
Italy.....	68,100	4,400
United States.....	59,700	4,900
France.....	43,900	5,900
Holland.....	27,200	8,700
Denmark.....	17,500	1,300

While Great Britain overtops them all by over 1,000,000 tons as regards steamers, the tonnage of Germany, with her comparatively new shipbuilding industry, is larger than that of Italy, the United States, France and Denmark put together. Compared with the figures of June 30, 1898, Germany has an increase in steamers of 111,080 and a decrease in sailing vessels of 1,410 register tons. Of the 1,386,300 tons now building in Great Britain, there are 51,700 tons for German account, 22,200 for Norway, 22,100 for Holland and 8,700 for Denmark.

### A DOMINION STEAMER LAUNCHED.

On the 12th July, Messrs. Gourlay Bros. & Co., Dundee, Scotland, launched a screw steamer of about 1,100 tons, 225 by 32.6 by 20.6 ft., for the winter mail and passenger service between Prince Edward Island and the mainland of Canada. She has been specially designed to suit the ideas of Captain M. P. M'Elhinney, the Canadian Government's nautical adviser, and has been built to Lloyd's highest class. She is especially adapted both at bow and stern for cutting her way through the ice fields on her proposed route, the hull being flush-plated and especially strengthened above and below the water-line, she has cellular double-bottom for water ballast, besides large trimming tanks for depressing the stern and elevating the bow. She will have triple-expansion engines of 2,900 effective horse-power, and an armament of four 6-pounder quick-firing Hotchkiss guns to enable her to serve as an auxiliary cruiser in time of war. Mrs. Robertson, the wife of Professor Robertson, the Dairy Commissioner of Canada, christened her the Minto, in honor of the present Governor-General of Canada.



## DETROIT.

## Special Correspondence to The Marine Record.

The Jenks Ship Building Co. has libeled the schooner D. P. Dobbins for the sum of \$260 for towing. The owners have been ordered to appear in court.

A circular issued from the office of the general superintendent of the Flint & Pere Marquette R. R. Co. announces that Mr. W. L. Mercereau has been appointed superintendent of the company's line of steamers.

Quite a number of strandings and other casualties have occurred around here this week, among them the Minnesota and City of Naples. And the car ferry Lansdowne and cargo boat N. B. Morley sunk through collision.

The barge Leader in tow, and the barge Dunmore in tow of the Canadian steamer Bannockburn, disputed the right of way. The Leader is sunk just above Belle Isle. The Dunmore received temporary repairs and proceeded on in tow to Kingston.

The collision that occurred this week between the ferry Lansdowne and the Morley is likely to prove quite an expensive casualty. The Detroit Fire and Marine Insurance Co. hold the insurance on the Morley, and London Lloyds on the ferry boat. Probably about \$30,000 is involved in the accident.

The Wyandotte yards of the Detroit Ship Building Co. are again more active and material for construction is arriving in fairly good consignments from the Carbon Steel Co., Pittsburg. Detroit has always been famous for the good metal put into its ships and the three vessels now in course of construction will have all metal all through. The new Star line boat will be ready on the opening of the passenger service next season.

Through a misunderstanding of signals the Bessemer steamer Sir William Siemens, collided with the wall of the Poe dock at the "Soo" Friday last and cut a big chunk out of it. The gate was also injured to some extent, though the steamer was not apparently damaged. There always has been this element of danger at the "Soo" canal, but now that there are three locks at that point the danger of a stoppage at Lake Superior has been minimized to a great extent, just as Col. Lydecker, Corps of Engineers, U. S. A., has pointed out. There is far more danger of the whole lower lake traffic being paralyzed through a collision in St. Clair Flats canal than at any other point. The St. Clair canal is a narrow cut, confining a channel between two old pile-driven wooden piers and used by all lake tonnage except the few vessels trading on only one lake. The St. Clair canal should be enlarged and a second or even a third channel made. The superstructure of the piers confining the channels ought also to be of stone or concrete and made a permanent, as well as a sightly government construction.

There is quite a discussion going on here this week among vesselmen on the possible effect of the opening of the drainage canal at Chicago, and the consequent probable lowering of the level of the lakes. Some of the more practical sort of men say that the difference will show anywhere between three inches and a foot, while those who are half scientific think it will perhaps keep about the same, and talk wisely about the supply, submarine rivers, rainfall, damp and dry seasons, etc. One man tells me that every extra fraction of an inch drained from one lake has an effect over the whole, another says that the loss over the Niagara is all that the lakes can stand without being lowered, still another maintains that the lakes are basins and can't be drained, etc., and so it goes, until a fellow is half inclined to hope that Canada, as well as the United States, will open all possible avenues for the water to escape, just to see who is right and who is wrong in their calculations. Whichever way this question is fixed we don't want to see still water in the river here, and we don't want to have the supply robbed from above Detroit whatever they may do with it below or eastward from here. This is one feature against that Canadian Lake St. Clair and Erie canal project.

THE Milwaukee customs office records show several recent changes in shipmasters. J. D. Campbell succeeds Gilbert Anderson on the schooner Evaline, John Hammell succeeds H. W. Hart on the Champion, of Green Bay, and W. C. Phelps takes the place of Oscar Parke on the steamer H. W. Root. Also the following transfers of vessel property: Tug Stone City, C. Metzner, of Kewaunee, to C. W. Strehenback, of Green Bay, for \$1,000; schooner Burt Barnes, Oberg & Co., to T. E. Torrison, of Manitowoc, for \$1,500; tug Emma Bloecker, Sophia Smith and others, to C. M. Hittell, of Racine; Anthony Bolster and others, to Peter Hanson, Washington Island, for \$3,700; Lucia A. Simpson to T. Clawson for \$2,200, and the schooner J. G. Boyce to parties not named for \$4,500.

## CHICAGO.

## Special Correspondence to The Marine Record.

Mr. Charles M. Cottrill, well-known as local agent of the Union line, died at his summer home in Oconomowoc last week, aged 55 years.

The chartered steamer German broke up a dredging firm's scow at South Chicago on Tuesday and damaged herself so that she will have to dry dock in Milwaukee. The German was working into No. 2 slip and the dredge scow blocked her way.

The Crosby Transportation Co., on the route between Sheboygan, Manitowoc and Muskegon, has been discontinued for lack of patronage. These minor ports ought to maintain a regular steamboat service and when it is again started next season perhaps they will.

Next season a new side-wheeler will be built for the Chicago Saugatuck & Douglas Transportation Co. The contract will demand a speed of 22 miles for the new steamer, whose cabins will be finished in the finest mahogany. As soon as the new boat goes into service the present fleet will be placed on the night route.

An official number has been assigned to the steamer Two Myrtles, 96 gross, 65 net tons, built in Manitowoc, Wis., and hailing from Milwaukee. The Two Myrtles was built to the order of John and Andrew Johnson, of Green Bay, Wis. Her principal dimensions are, 94 feet over all, 80 feet keel, 22 feet beam and 7 feet depth of hold. She is steel sheathed to work in light ice. Engines have cylinders 14 $\frac{1}{4}$  by 16 inches in diameter, one boiler 6 feet in diameter by 11 feet in length.

I can see the shipping trade drifting away each season to South Chicago. Now, our highly esteemed friend and late patron, Mr. O. S. Richardson, who handles the product of the W. L. Scott Coal Co., Erie, Pa., is thinking of moving his fine large river business unless the port is made accessible to modern tonnage. The river and port will lose one of its most active industries if Mr. Richardson throws up the sponge, but what with shoal water and the tunnels, or the tunnels alone, for their crown rules the depth of the river, I am mighty dubious of facilities being offered the firm before next season, and if not, it's all off.

A Cincinnati firm has the contract for a portion of the Hennepin canal, while working at a section in Henry and Bureau counties, the bottom caved in. It was found that the ground for one hundred feet around where stood the big shovel, had sunk ten feet. Subsequent borings brought to light the fact that no solid bottom existed for a depth of 42 feet below the level of the hard pan. Inasmuch as the canal has to be cut, according to the accepted surveys, through about four miles of ground apparently of the same consistency, the case presents some engineering features that are quite out of the ordinary, and it is puzzling the contractors to know how to accomplish thefeat.

C. J. Smith, general manager of the Canada-Atlantic Transit Co., states that the package freight business this season is away ahead of last year, and he also announced that two freighters of large size will be added to the company's fleet next season. "We consider that boats of 4,500 to 5,000-ton class are to be about the maximum size for merchandise and grain business of the lakes," said Mr. Smith. "This class is about 1,000 tons greater than the boats in our fleet at present, but we contemplate a couple of additional boats of somewhat larger size than any that we now have. One of these will probably be put in the Chicago, and the other in the Duluth trade. We also expect to run a boat to Ft. William next season."

A dispatch from Washington says: Proposals will be opened at the Treasury Department on Aug. 16, for the work of erecting a new life-saving station at Charlevoix, on Lake Michigan. Supt. Kimball has issued authority for advertisement calling for bids. It is estimated that the new station will cost about \$8,000. The plans provide for a frame structure with an extensive boat shed under the same roof. The station is expected to be completed during the present season. Lieut. Reinberg, of the revenue cutter service, has been assigned to duty as inspector of the life-saving service on Lake Michigan, vice Capt. Moore, deceased. It is understood that Lieut. Reinberg's assignment is but a temporary one, and that he will remain on duty in the Lake Michigan district only during the summer.

The steamer City of Grand Rapids, which sprung a leak while carrying 200 passengers to Milwaukee, was built at Grand Haven in 1879, and was rebuilt two years ago, when she was changed from an excursion to a regular passenger steamer. She was owned at the "Soo," and ran on Lake Superior until three years ago, when she was purchased by the South Haven & Chicago Transportation Co., and ran two seasons between South Haven and Chicago. She was inspected July 29 by Honner and Blocker, of Grand Haven. Her passenger certificate was raised 88, allowing 588 passengers. There was a northwest sea and it was noticed she was making water forward. One siphon was clogged, but was soon cleaned and working. As water was making quite fast, she was headed for South Haven. It is now said that she is perfectly seaworthy, no rotten timber being found in the hull.

With 4,000 persons cheering him on, last Thursday surfman William H. Batchelor, of the Jackson Park life-saving crew, plunged into the lake, swam out to a drowning man and brought him safely to shore. Just beyond, Capt. St.

Peter, with a life-boat and crew, went to the rescue of another man who was clinging to an upturned boat, while the third man of the fishing party, Walter Carr, had gone down and was drowned. His body was recovered an hour later. The individual bravery of surfman Batchelor should be duly recognized by the Treasury Department. Similar rescues are being frequently made throughout the season of navigation on the lakes, but the circumstance is allowed to drift past, with, perhaps, a brief allusion in the annual report of the chief of the life-saving service. The studied neglect of recognition for acts of personal bravery is getting monotonous. It is also liable to make would be life-savers rather careless, moreover, it is ignorantly culpable from a government standpoint, and quite as bad from a local or municipal point of view.

## BUFFALO.

## Special Correspondence to The Marine Record.

Capt. G. D. Fitch, Corps of Engineers, U. S. A., stationed at Oswego, N. Y., will remove the spars of the sunken schooner St. Peter.

Who will be the tug manager at this port is not yet given out for publication. Duluth and Chicago interests are also guessing, and wires are being pulled all around.

The Maytham as well as the Hand & Johnson Tug Co., will be operated under the management of the Great Lakes Towing Co. This will reduce expenses and therefore give cheaper towing with equal facilities at this port.

The head of the lakes can use about 2 $\frac{1}{2}$  million tons of coal next winter, and it is now thought that about one-fourth of that amount will be shipped by rail, it certainly can't all be carried on vessels, as there is a lack of tonnage even with the increased rates of freight.

Mr. James Boyle, U. S. consul at Liverpool, England, is a naturalized citizen, also a newspaper man, and was at one time "devil" at Dudley & Burns printing establishment in Toronto. Mr. Boyle is a close friend of President McKinley, and while on a vacation from his post is visiting friends in Canada.

Those who are likely to know, say that the RECORD photographs of Capts. Davidson, Collier and Mr. Newman, printed all in line a couple of issues ago, showed the president, general manager and secretary and treasurer of the Great Lakes Towing Co., in the sequence and order named. Next week though will probably tell the tale.

It is now reported that the Lake Carriers' Association will advance wages on lake vessels 40 per cent. to take effect on the 15th. As this is evidently a lie, it would be in order for the Lake Carriers' Association to find out who is playing fast and loose with reports of their meetings and intended action. It ought not to be very difficult to ferret out this skunk and see the reason of the animus to vessel owners, also the fraud upon news vendors.

Robert Taylor, late of Alpena, Mich., was arrested by a United States deputy marshal this week, on a charge of assault on the high seas, preferred by Erich Ott, a deckhand on the schooner Belle Hanscomb, of which Taylor was mate. Taylor was committed to jail pending a hearing before Commissioner Silver. The master of the schooner, Capt. Leonard, thought that he could order the marshal off his boat, but in that he was mistaken, and he cooled down when his empty bluff was called.

The new Canadian steamer Toronto made her trial trip last week to the Thousand Islands, and Frank E. Kirby, of Detroit, who was consulting engineer during her construction, is highly pleased over the result. The contract called for 17 miles per hour with a coal supply of two pounds per h. p. an hour. The steamer showed 17.3 miles an hour and did it on only 1.72 pounds of coal per h. p. per hour. The Toronto is owned by the Richelieu & Ontario Navigation Co., and will ply between Toronto and Prescott.

For the past two years Capt. Edward E. Chapman, who is in charge of the U. S. Life-Saving Service, ninth district, has been striving to secure for Buffalo larger and more commodious quarters for the men who risk their lives on the river and lake. While Buffalo has a station the equal, so far as the boats and men is concerned, of any station on the Great Lakes, it is conceded on all sides that it is not adequate for the requirements of a city of its size and commercial importance. The efforts of Capt. Chapman to bring about a better condition here promise to bear fruit. Capt. C. A. Abbey, of the United States Revenue Marine, and superintendent of construction of the United States Life-Saving Service, has looked over the ground and consulted with Capt. Chapman as to the needs of this station. Having secured all the data he desired he will report favorably to the department at Washington for the required improvements.

THE eight historic cannon which have recently been mounted in the park at Put-in-Bay Island, Lake Erie have been named. They are arranged about the historic "Perry willow," which has heretofore been the only monument to the brave American and British seamen buried under it. Seven of these cannon are named after Lieut. Garland, Capt. Fannis, Lieut. Stokes and Commodore Barclay, of the British Navy, and Lieut. Brooks, Midshipman Lunt and Midshipman Clark, Americans, who died in the battle of Lake Erie. The eighth cannon is named after Commodore Perry.

## CLEVELAND.

*Special Correspondence to The Marine Record.*

Capt. John Baird is now master of the George T. Hope.

Capt. Al Mitchell has returned to business after making a round trip on the W. H. Gratwick.

Capt. W. A. Irvine has been appointed master of the Iron Chief, and Capt. Martin Kurth to the schooner Iron Cliff. These appointments are for the new addition to the Corrigan fleet.

Edward Porritt, special correspondent for the Herald, Glasgow, Scotland, attended the launch of the Malietoa at the Lorain yards of the American Ship Building Co. on Saturday last.

Mr. C. B. Calder and Capt. Westcott, of Detroit, were in Cleveland, on Tuesday. Evidently the surroundings in the "City of the Straits" agree with Mr. Calder, for he looks younger and better than ever.

Owing to a scarcity of material a large number of men are laid off work at the several shipyards. Some Cleveland shipyard men visited other ports and found the conditions nearly the same elsewhere—all waiting for steel.

An official number has been assigned by the Bureau of Navigation, Treasury Department, Washington, D. C., to the steamer Douglass Houghton, 5,332 gross and 4,034 net tons, built in Cleveland and hailing from Duluth, Minn.

Entertaining reading is not always instructive, but the "Sketches and Stories of Lake Erie Islands," by Theresa Thorndale, should be read by almost everyone around these latitudes. The Register, Sandusky, sends it postpaid for \$1.10.

The Great Lakes Towing Co. is now nearly in working order, and it is likely that the officers will be named this week. There is a feeling of diffidence regarding giving out the names of the active officers, and, while I have heard that the slate is fixed there is nothing given out for publication this week.

It was thought that the Lorain yards of the American Ship Building Co. were nearly perfect in their plans and equipment. While attending the launch of the Malietoa on Saturday, I noticed a large addition being made to the machine shops and preparations being made to place more stationary machinery.

Charles P. Gilchrist has bought the schooner R. Hallaran from Capt. Thomas Murphy. The price was not given out. The Hallaran was one of the vessels that was chartered by the Atlantic Transportation Co. last fall. She started for the coast but did not get through. She wintered at Valley Field and was brought back last spring. She will tow as a consort with one of the steamers of the Gilchrist fleet.

The Northern Transit Co.'s. route to the St. Lawrence has become very popular, and passages for the next few weeks should be booked well ahead. Messrs. Farasey and Marron, general agents, are experienced managers in the steamboat passenger traffic, and nothing is left undone to make the patrons of the Northern Transit Co. enjoy the trip. The Empire State and the Badger State are both favorite boats with the traveling public.

The bar formed on the west side of the harbor entrance has given more trouble this week, several vessels having grounded there. Large boats are now engaging a tug, a good thing for the towing companies, but an unjust levy on the owners of vessels consigned to this port, and one which is bound to work harm to the port in the future. It is the duty of a port to facilitate its shipping instead of trying to drive it away to other places.

The Lorain Times states that the schooner Chas. Kimball, Capt. Dawner, mistook the open furnace doors of the water-works pumping station for the harbor beacon, and consequently the schooner was piled up on the beach. The schooner was loaded with sand. The captain refused the assistance of steam, saying that he guessed he could sail her off, which he did, after jettisoning about half his cargo. And of such are some of the smart schooner sailors.

It is a pleasure to record such an act as that of Mr. McMillen, second mate of the side-wheel steamer City of the Straits. On Sunday night a man somewhat under the influence of intoxicants reeled off the dock at the foot of St. Clair street and near to where the steamer was laying. Having seen the condition of the man previous to his falling into the river, Mr. McMillen lost no time in taking a header after the helpless creature, caught him when he came to the surface, and by a dexterous movement twisted the man around so that he could not interfere with his rescuer, and then struck out for the dock where he landed his catch. It was very dark and there were few people around the wharf, so it is almost certain that a life would have been snuffed out lacking the assistance and intrepidity of Mr. McMillen. Here is a chance for the U. S. Life Saving Service or a humane society to encourage Mr. McMillen to similarly dampen his socks on a subsequent occasion. It is meet to give praise where it is due.

The following dispatch printed in Sunday lake papers, is another of the fake stories, regarding which I had something to say in this letter last week: "Minneapolis, August 5. A special from Duluth says: At a meeting of the Lake Carriers' Association, controlling the wages of 90 per cent. of the large shipping interests on the Great Lakes, it was agreed to advance wages on lake vessels 40 per cent., the advance taking effect August 15. This is the greatest ad-

vance in pay ever made by lake carriers, and does not come in response to threats of any strike, but simply because men are scarce." Here is a Cleveland item sent from Duluth away west to an inland town and then telegraphed back to Cleveland. The chairman of the committee on wages, appointed last week, says that the story is "made out of whole cloth," not a syllable of truth in it. The committee will make their report on Tuesday next, and not before. The query arises, who is sending out these fake dispatches? Last week a similar story reached St. Paul, via Duluth, this week Minneapolis was chosen. Why the inland twin cities?

There is no question but that a shoal ridge has formed off Ashtabula harbor since the dredging was completed in the early part of the season. The Daily Beacon, under the head line "Broke the Draft Record," describes it this way. "The big schooner Fontana came in Wednesday evening with a cargo of ore for the Minnesota dock, and was drawing 18 feet 7 inches forward, 18.8 aft, and 19 feet midships. The bar outside the harbor was the only place that she grounded, and after being dragged over it she moved to her dock without trouble." It is possible, I suppose, for the Fontana's ends to be cambered 5 inches forward and 4 inches aft, but if so, she must be a daisy to dry dock. It's perhaps a good way to have her though, kinder protects stem and sternpost, can ground in the center and swing either end around, would be something after the fashion of having a foot of the centerboard down. This several inches of sagging is no doubt better than the same amount of hogging, but land sakes, she must be powerful supple in her fastenings to give and take so easily. On second thought, that Daily Beacon man must surely be off a little some way, if only an inch or two.

## ESCANABA.

*Special Correspondence to The Marine Record.*

The steamer Lotus, of the Escanaba-Gladstone line, was inspected this week and found to be in excellent condition.

Hill Bros., of Fish Creek, seem to keep on making preparations towards the establishment of an opposition line to the Hart Steamboat Co., of Green Bay.

A little hasty work on the part of a Green Bay bridge-tender resulted in closing the structure upon an outbound schooner, damaging the bridge to the extent of about \$200.

The shipments of lumber from Duluth and Superior up to the present time are far in excess of any former year, being 157,468,530 feet for the corresponding period last season. The aggregate shipments from there last year amounted to 333,000,000 feet.

In a recent conversation with a gentleman high in the ore business he said: "If it had not been for the late opening of navigation, the recent strikes at Lake Erie ports and the shortening of the end of the season, it would have been nearly impossible to furnish enough ore to keep up the present rate of shipments as the stock piles are getting very low as it is, besides some of the mines have not been able to secure miners enough to work the mines to their full capacity.

The Copper Range Railway, at Houghton, is sinking cribs up to the new harbor line for 1,000 feet west of the railroad bridge crossing, Portage Lake, and will make very extensive improvements along the water front, consisting of terminal stations, general offices, wharves, cove sheds, etc. The plan includes locating several large warehouses and manufactures, to be built this fall and next spring, which will necessarily result in greatly adding to the marine business of the port.

The freight market remains in a very healthy condition and prices continue to make small advances daily. Several charters have been made on wheat from Duluth at 3 cents, being equal to \$1.12 per gross ton on ore, which is 2 cents above some contracts made to run through the present month from Lake Superior. Coal rates will undoubtedly open strong this week with few takers, a fact which is causing no end of worry to a great number of dealers having old-style machinery, as it is certain to cause the biggest kind of a blockade this fall when the coal does move.

It is thought here that the chances for a raise of wages for second mates and all labor below them, are rather slim. They do the bulk of the heavy work and flop around the decks in the fall of the year like sea gulls and are not paid any too much at the best of times. Owners that placed their craft for the season at half of the going rates will not want to pay a nickel more than they are doing. The common herd will thus suffer from the business inaptitude of their employers; however, those who don't want to sail can stay ashore and starve; just as well, perhaps, as perishing their bones in the cold on the lakes. After a few seasons at miserable wages p'raps it will thin out a few of the fresh water laborers. It's a hard way of earning a dollar or two anyway in the fall. The considerate, liberal owner will always have the best class of labor and, as one hardy old fellow said to me this week, "I hope the committee on wages at Cleveland will think of us fellows and not begrudge a raise of a few dollars a month to pay for extra duds to meet the cold weather, and I can tell you it's getting a sort of sniftish on the lake at nights already."

DURING the fiscal year which ended June 30 there were enrolled at Duluth 204 vessel of all descriptions with a gross measurement of 175,377 tons. Number of vessels enrolled in 1898, 153, tonnage, 120,653. In 1897, 111; tonnage, 86,243. 1896 86; tonnage, 26,478.

## FLOTSAM, JETSAM AND LAGAN.

The J. H. Rutter and the Metacomet are now colliers in the down east coal trade.

It is computed that there are 1,000 vessels which cross the North Atlantic Ocean regularly every month, some of them twice a month.

The schooner Mineral State, Buffalo to Lorain, with steel billets, sprung a leak on Monday and was with difficulty towed into Conneaut. The leak was due to defective caking.

Taking her too literally.—"You can't sit here, ma'am." "But I am one of the directors' wives." "Well, ma'am, if you were his only wife you couldn't sit here, for this seat is reserved."—Fairplay.

Another 8,000-ton steel cargo steamer built at South Chicago to the order of the Minnesota Steamship Co., Cleveland, will be launched on Saturday, August 12. She will be named the Maunaloa.

The steamer India, built by the Calvin Co., Kingston, Ont., and regarded as one of the best built freighters of her size on the lakes, is on her maiden trip to Lake Superior. Her engine was built in London, England.

Hill Bros. are arranging to build a new passenger and freight steamer at Fish Creek the coming winter. Her length is to be 150 feet. The Cecelia Hill was built at Fish Creek and is considered one of the handiest boats on Green Bay.

Assistant Secretary of Treasury Spalding has reduced the fine in the case of the steamer Brazil, owned by J. H. Smith, from \$5,000 to \$10. The fine was incurred on account of failure to present proper health certificates from the consul at the port he last sailed from.

Canals, and particularly ship canals, are costly undertakings. The Suez canal cost \$100,000,000, the Manchester ship canal \$80,000,000, the North Sea canal \$37,500,000, the North Holland and the Corinth canals \$15,000,000, each, while the partly completed Panama canal has swallowed up over \$250,000,000.

Pilson—Are you going to take part in that guessing contest?

Dilson—Oh, no; they'd rule me out as a professional.

Pilson—Professional?

Dilson—Yes; you know I am connected with the Weather Bureau.—Ohio State Journal.

The British steamship Holbein, which recently arrived at Liverpool, picked up Capt. William A. Andrews, known as the "lone navigator", who left Atlantic City on June 18 in a little vessel barely twelve feet in length, to attempt to cross the Atlantic. He was found in an exhausted condition on July 12, about 700 miles from the Irish coast.

It is strange but nevertheless a well-known fact, that the majority of seafaring men do not know how to swim, and when a sailor falls overboard he very often is drowned because he cannot keep afloat long enough to be saved. Ability to swim should be a qualification necessary in securing a seaman's job. The foregoing is a nice little story, but it's a lie, the non-swimmer is the exception.

The White Star Line Steamer Oceanic, which was launched in January last, being the largest ship in the world, length 704 feet and gross tonnage 17,040 tons, will sail from Liverpool on her initial trip Sept. 6, and thereafter continue making regular trips on the Atlantic service. The steamer is scheduled to leave New York, Sept. 20 next, under the command of Capt. Cameron formerly of the Teutonic.

Captain H. H. Williamson, the well-known coast pilot and captain of one of L. Luckenbach's ocean tugs is very much dissatisfied with the code of signals by whistle now employed by steam vessels of the United States, and says that they are contradictory and confusing. He has formulated a new code of signals, which are simple and direct in giving the course of the vessel.—The New York Maritime Register.

The government officials should see to it that the wrecks of the Fountain City and Pride are removed from this bay at an early date. They are a menace to navigation, as has been pointed out in these columns time and again in the past few months. These obstructions are especially dangerous to sail craft coming up the bay under canvas when an easterly wind prevails, as they must hug the shore pretty well to make the draw of the bridge in safety.—The Advocate, Sturgeon Bay, Wis.

Here are some of the terrible things which, according to a country exchange, are likely to befall a delinquent: Last week a delinquent subscriber said that he would pay up on Saturday if he lived. He's dead. Another, "I'll see you tomorrow." He's blind. Still another one said: "I hope to pay you this week or go to the devil." He's gone. There are hundreds who ought to take warning by these procrastinators and pay up their subscriptions now.—From Jerry Simpson's Bayonet.

A lumber hooker, iron ore droger, or passenger steamer, may be fitted out, equipped ready for service, etc., but they can't, or rather shouldn't, be put in commission. It is only national ships of war that go into commission. Another inapplicable phrase in lake use is "in ordinary." A vessel is said to be in ordinary when her crew is discharged and she is temporarily laid up, or waiting for a charter; this, also, is a transplanted naval term. A good many others have been appropriated from railroad parlance, such, for instance, as "package freight."

## DEPUTY STATE ENGINEER OF NEW YORK.

(WM. PIERSON JUDSON.)

In recording marine events from week to week throughout the year, it is always a pleasure for the RECORD to note the marked personality of those who lend their interests, time, talent, and energy to the furtherance and upbuilding of that which more nearly concerns the present and future advancement of the lake marine.

The subject of our brief sketch has long been identified with active work on these waters, and chiefly on Lake Ontario, and has eminently filled the role which we have ascribed to the studious habits of those who cultivate a logical sequence and the science of determining hitherto unknown quantities, facts and data. Such, we assume, have been the chief characteristics of Mr. Judson's professional career on the lakes, and in thus marking out his line of life work, we may further say that he has but walked in the footsteps of his worthy sire, Col. John W. Judson, of Oswego, N. Y., who was a graduate of the West Point Military Academy in the class of 1836, and afterward had charge of United States harbor work on Lake Ontario.

William Pierson Judson was born in Oswego, May 20, 1849, and attended the public schools of that city, graduating in 1865. He entered the service of the United States in the Engineer's Department as draughtsman and leveler on the work of rebuilding Fort Ontario with permanent masonry which had been in progress for some years in charge of his father. The instruction in civil engineering which was given him by his father, with constant study during practice in the office and field, combined to fit Mr. Judson for the responsible positions which he has since filled. In 1869 he made the original survey of the lake front of Oswego for the outer harbor, and also the large map of it upon which the Board of Engineers planned the outer breakwater, which was begun in 1871 by Major John M. Wilson (now general and the chief of the U. S. Corps of Engineers) to whom Mr. Judson was assistant engineer in 1871 to 1875, and under whom Mr. Judson had personal charge of this and other harbor works on Lake Ontario.

Mr. Judson has served for 30 consecutive years as the U. S. assistant engineer to the ten successive officers of the U. S. Corps of Engineers who have had charge of the work of rivers and harbors and forts in that region, and during all that long period has been familiar with, not only the harbors on Lake Ontario, but also with others on Lake Champlain, St. Lawrence river, and some on Lake Erie, and has known of their construction, their damages, their repairs and their maintenance in a way which would only be possible by such continuous duty.

In 1893, as assistant to Major Dan C. Kingman, of the Corps of Engineers, he made a minute survey and map of Oswego harbor and river up to the dam, and of the city streets and railroads, which was adopted as the official map of the United States harbor line.

During the progress of these works, Mr. Judson has meantime studied closely the many features of lake commerce, and has been the member for New York State of the Executive Board of the International Deep Waterways Association, which last met at Cleveland in 1895.

Mr. Judson has been connected with deep waterways since 1874, when he was assistant engineer to Major John M. Wilson on the ship canal survey of that date. He was also assistant to Capt. Carl F. Palfrey, on the ship canal report of 1890, and to Major Thomas W. Symons on his ship canal report of 1897.

Besides these duties, in connection with the subject of deep waterways, Mr. Judson prepared, in 1890, a pamphlet and map entitled "From the West and Northwest to the Sea," which were published and widely circulated by those commercially interested in the ship canal subject, the pamphlet being afterwards re-published at Washington as a Senate document.

In 1892, Mr. Judson made a further report upon "An Enlarged Waterway between the Great Lakes and the Atlantic Seaboard," which was also published by those who were interested in advancing the general subject.

This dealt more especially with the route from Oswego to Troy through the Oswego-Oneida-Mohawk Valley, and with the vital subject of a water supply for the summit level, which was shown to be attainable from storage in the Adirondack region, supplemented by a feeder from Lake Erie, whose water is now carried in the present Erie canal as far as Macedon, 20 miles east of Rochester, (where it is 35 feet higher than the Rome summit level), and whence it can be carried seventy miles further eastward by building a feeder

on a regular slope along the high land lying southward, until the summit level is reached, just east of Syracuse.

Recent statements which have been published regarding the results of the deep waterway surveys now in progress, indicate that this route and method will prove to be the one finally adopted, if a ship canal is to be built.

In 1896, the first U. S. Deep Waterways Commission put Mr. Judson in charge of the subject of compiling all existing data and obtaining new data for making the best location of a ship canal from Lake Ontario to the Hudson river through the Oswego-Oneida-Mohawk valley, which Mr. Judson had advocated, as above described, as being the best route. As a result, the commission published, in 1896, Mr. Judson's report with a large profile of the line and an accompanying map with contours, showing the valley and the line.

These formed a part of the large volume issued by the commission, which is not now easily obtained.

With his characteristic public spirit, Mayor J. D. Higgins, of Oswego, has recently had this report and the profiles and map reprinted in separate pamphlet, in order that the peculiar advantages of the route by way of his city should be more generally known.

Aside from Mr. Judson's official duties, he was appointed by the court in 1876, and still serves, as commissioner to regulate and divide the water power of the Oswego river at its first dam for the operation of the various water powers

## NOTES.

AN American electrician, Mr. W. J. Clarke, has suggested a means of detecting the presence of a ship or an iceberg by wireless telegraphy. The apparatus which he proposes is so arranged that when two ships approach each other a large vibrating gong will ring in each, and the transmitter is so arranged that the signal would be operated at a distance of from one to ten miles.

A MOVEMENT in favor of subsidies to American steamship lines is receiving strong support. J. J. Hill, president of the Great Northern Railway Co., in a speech at Seattle, argued strongly in favor of subsidies. He declared that with a subsidy for steamship lines America's trade with the East and particularly with China would startle the world. Mr. Hill has exceptional opportunities to estimate the value of Pacific trade, as his railway is connected directly with this trade, and derives a great deal of business from it.

THE tug Vigilant, building by Lewis Nixon, Elizabethport, for Lieut. Com. John C. Fremont, Supervisor of New York Harbor, is 112½ ft. over all, 98 ft. water line, 22 ft. beam, 13 ft. depth and 8 ft. draft. She will be fitted with Wells' quadruple expansion engines of 700 horse-power and a Roberts boiler. The Supervisor's fleet, including the Vigilant, now numbers seven vessels—of which six vessels are equipped with Roberts boilers. The continued use of Roberts boilers in this fleet after a number of years experience speaks volumes.

THE Nordischer Bergung Verein, of Hamburg, are being widely complimented on the manner in which they accomplished the salving of the Paris. Many theories were advanced as to the most effective method, but the German salvors adopted the principle of tilting. They first blasted away the rocks which pierced the bottom and acted as a pivot, and then put a great quantity of ballast in the stern, which had floated from the time the vessel stranded, and thus they caused the steamer to slide off the rocky ledge into deep water at the highest tide.

LLOYD'S last "Register of Shipping" gives the entire fleet of the world as 28,180 steamers and sailing vessels, with a total tonnage of 27,673,528, of which 39 per cent. are British. The Americans come next with 3,010 vessels, with a total tonnage of 2,465,387. Norway has 2,528 vessels, with a tonnage of only 1,694,230. Germany has 1,676 vessels, with a tonnage of 2,453,334, in which are included her particularly large ships. Sweden has 1,408 vessels with tonnage 605,991. Russia has 1,218 vessels, with a tonnage of 643,527. Italy has 1,150 vessels and France 1,182. Japan has 841, Denmark 796 and Spain 701.

FREQUENT sea disturbances that are sometimes called earthquake waves are recorded in New South Wales, Australia. Mr. H. C. Russell, the government astronomer, states that these have a period of about 26 minutes from crest to crest, which correspond to the period of waves from earthquakes, but it has been shown that only about 1 per cent. have really originated in earth movements. About 60 per cent. have their origin in confined waters far to the south under a low pressure. The low barometer is accompanied by a rise in sea level, resulting in currents that meet in Bass Straits, producing waves that are transmitted through Tasman Sea, and are recorded by the Sydney and Newcastle tide-gauges. Heavy gales originate at least 10 per cent. more in the Tasman Sea. The remainder of these periodic waves, which somewhat resemble those that have been noticed in Lake George, are believed to be due also to meteorological causes, although the connection has not yet been traced.

ADMIRAL BETTOLO has just completed designs for four Italian battleships, the building of which will be commenced as soon as possible, and will occupy not more than 24 months. The Italian military journals assert that the Admiral has solved the problem of uniting in one vessel of great size all the advantages offered by battleships and cruisers, namely, high speed, 22 knots at least, with the most powerful artillery and the most complete protection. The speed is to be obtained by an alleged entirely novel form of water tube boilers. The armor plating is to be about one-third the weight of the present heaviest plating on any warship afloat, while it is to be more powerful owing to some remarkable improvements over the Krupp and Harvey hardening processes. The displacement of these battleships is not to exceed 8,000 tons, but they are to be speedier and carry bigger guns than any battleship now existing, while their defensive capabilities are to be greater. Such, at any rate, is the assertion of the Italian experts.



WM. PIERSON JUDSON, C. E.

on the west side of the Oswego river, including the well-known Kingsford Starch Factory and others.

From 1884 to 1890 he was actively connected with one of the leading electric companies, and had much to do with the general introduction of electric power for various uses and industries.

In 1894, at the request of the Mayor and as the Consulting Engineer to the Department of Public Works he prepared a discussion of the "City Roads and Pavements suited to Oswego," which has been published in book form, and has had a large sale by the Engineering News, of New York, who consider it as one of the standard authorities on the subject.

This year Mr. Judson received the appointment of Deputy State Engineer, with a residence at Albany, N. Y., and in the opinion of a large number of persons, including his lake acquaintances, State officials and others, it would be difficult to find a more energetic and expert scientist to fill that office.

Mr. Judson is a member of the British Institution of Civil Engineers, a member of the American Society of Civil Engineers, and an associate member of the American Institute of Electrical Engineers. He is one of the oldest members of the Acenian Lodge, F. & A. M., of Oswego. Furthermore, it can, perhaps, be recorded to his credit that he has never been actively identified in affairs political.

## TREASURY DECISIONS.

## INSPECTION CERTIFICATES OF SAIL VESSELS.

Customs officers not required to furnish certified copies of inspection certificates to sail vessels.

TREASURY DEPARTMENT, July 29, 1899.

SIR: Referring to your letter of the 25th instant, in the matter of furnishing three copies of the inspection certificates of sail vessels over 700 tons burden, inspected under the act of Congress approved December 21, 1898, you are informed that the law does not require that such copies of certificates shall be furnished. The only copy of sail vessel certificate is that to be furnished by local inspectors to collectors of customs for file in their respective offices, as per department regulations contained in circular 96, July 17, 1899. Respectfully yours,

O. L. SPAULDING,  
Assistant Secretary.

Collector of Customs, Portsmouth, N. H.

## LIGHTS FOR CATBOATS, ETC.

Colored lights must be displayed on small catboats, yachts, and sailboats.

TREASURY DEPARTMENT, July 31, 1899.

SIR: This department is in receipt of your letter, dated the 28th instant, inquiring what lights should be displayed at night by small catboats, sloop yachts, etc., both under and over 5 tons burden, under the act of June 7, 1897.

You are informed that the department finds no law exempting from the operation of article 5 of the act vessels such as you mention, with the exception of fishing and pilot boats, and vessels of less than 10 gross tons under way during bad weather.

The courts would probably hold that the article requires such vessels, with the exceptions mentioned above, when under way in rivers, harbors and inland waters, to carry colored lights, as specified in article 2 of the act.

Respectfully yours, O. L. SPAULDING,  
Assist. Secretary.

Collector of Customs, Providence, R. I.

## STAMP TAX—BILLS OF LADING.

Tax imposed on bills of lading covering shipments from a port or place within the United States to any foreign port or place.

TREASURY DEPARTMENT,  
OFFICE OF COMMISSIONER OF INTERNAL REVENUE,

WASHINGTON, D. C., July 27, 1899.

SIR: This office is in receipt of a letter under date of July 13, 1899, from J. M. Hannaford, vice president and general manager, Northern Pacific Express Company, St. Paul, Minn., who states that in reading the instructions issued by the various express companies to their agents he finds they conflict in many instances, and he asks to be informed what denomination of internal revenue stamp is required to be affixed to receipts for shipments forwarded between the various points as shown below, with the understanding that a receipt of bill of lading is intended to cover a shipment from point of origin to destination:

From Chicago to St. Louis.

From Chicago to Winnipeg, Manitoba.

From Chicago to Victoria, British Columbia, part rail and part steamer.

From Chicago to Juneau, Alaska, part rail and part steamer.

From Chicago to Liverpool, England, part rail and part steamer.

From Seattle to Victoria, all steamer.

From Seattle to Juneau, all steamer.

From Seattle to San Francisco, all steamer.

From Seattle to Hongkong, all steamer.

You will please advise Mr. Hannaford that receipts or bills of lading covering shipments between points within the United States require a 1-cent stamp; receipts or bills of lading covering shipments from the United States into Canada by rail or by any conveyance other than steamboats or other vessels, making a regular business of plying only between ports in the United States and ports in British North America require a 10-cent stamp (see Treasury decision 21255); receipts or bills of lading for any goods, merchandise, or effects, to be exported from a port or place in the United States to any foreign port or place require a 10-cent stamp.

In illustration of the above, a receipt covering a shipment from Chicago to St. Louis requires a 1-cent stamp; a receipt covering a shipment from Chicago to Winnipeg, Manitoba, requires a 10-cent stamp; a receipt covering a shipment from Chicago to Victoria, British Columbia, part rail and part steamer, requires a 10-cent stamp; a receipt covering a shipment from Chicago to Juneau, Alaska, part rail and part steamer, requires a 1-cent stamp; a receipt covering a shipment from Chicago to Liverpool, England, requires 10-cent stamp; a receipt covering a shipment from Seattle to Victoria, British Columbia, all steamer, if issued by a steamer or vessel making a regular business of plying only between ports of the United States and ports in British North America, does not require to be stamped, otherwise a 10-cent stamp is required; a receipt covering a shipment from Seattle to Juneau, Alaska, all steamer, requires a 1-cent stamp; a receipt covering a shipment from Seattle to San Francisco, by water, requires a 1-cent stamp; a receipt covering a shipment from Seattle to Hongkong, all steamer, requires a 10-cent stamp.

Respectfully yours, ROBT. WILLIAMS, JR.,  
Acting Commissioner.

MR. FREDERICK VON BAUMBACH,  
Collector Internal Revenue, St. Paul, Minn.

## NOTICE TO MARINERS.

LIGHT-HOUSE INSPECTOR'S OFFICE,  
TENTH LIGHT-HOUSE DISTRICT,  
Buffalo, N. Y., August 7th, 1899.

Notice is hereby given that by order of the Light-House Board, the following changes in the buoyage of Niagara river were made on August 3d, 1899.

## BUOY DISCONTINUED.

IRON WORKS SHOAL BUOY, 25 foot spar, painted with red and black horizontal stripes.

## BUOYS ESTABLISHED.

DREDGE CHANNEL (NORTH) BUOY, 25 foot spar, painted red and numbered 2, placed in 20 feet of water to mark the west side of the lower end of the dredged channel below Tonawanda Island.

DREDGED CHANNEL (SOUTH) BUOY, 25 foot spar, painted red and numbered 4, placed in 17 feet of water to mark the west side of the upper end of the dredged channel below Tonawanda Island. It is opposite the end of the dock on the north point of Tonawanda Island.

TWELVE FOOT SHOAL BUOY, 23 foot spar, painted red and numbered 6, placed in 14 feet of water to mark a dangerous spot about 100 yards west of the range line at the head of Niagara river. Horseshoe Reef Light-House bears from it S. by E.  $\frac{1}{4}$  E., distance about 2,900 feet.

FRANKLIN HANDFORD,  
Commander, U. S. N.  
Inspector 10th L. H. District.

## TRAFFIC THROUGH THE ST. MARY'S FALLS CANALS.

STATISTICAL REPORT OF LAKE COMMERCE THROUGH CANALS AT SAULT STE. MARIE, MICHIGAN AND ONTARIO, FOR THE MONTH OF JULY, 1899.

## EAST BOUND.

ITEMS.	U. S. Canal.	Canadian Canal.	Total.
Copper, net tons.....	18,621	587	19,208
Grain, bushels.....	2,175,283	192,100	2,367,383
Building stone, net tons.....	11,382	.....	11,382
Flour, barrels.....	789,039	181,458	970,497
Iron ore, net tons.....	2,284,633	272,427	2,557,060
Iron, pig, net tons.....	4,370	.....	4,370
Lumber, M. ft. B. M.....	162,490	3,966	166,456
Silver ore, net tons.....	.....	.....	.....
Wheat, bushels.....	5,765,655	1,612,212	7,377,867
Unclassified freight, net tons.....	15,356	8,140	23,496
Passengers, number.....	4,271	2,385	6,656

## WEST BOUND.

ITEMS.	U. S. Canal.	Canadian Canal.	Total.
Coal (hard), net tons.....	122,089	13,115	135,204
Coal (soft), net tons.....	425,511	105,300	530,811
Flour, barrels.....	.....	.....	.....
Grain, bushels.....	.....	5,000	5,000
Manufactured iron, net tons.....	18,474	477	18,951
Salt, barrels.....	18,132	7,000	25,132
Unclassified freight, net tons.....	67,856	2,378	70,234
Passengers, number.....	6,127	1,222	7,349
East bound freight, net tons.....	.....	3,265,786	3,265,786
West bound freight, net tons.....	.....	759,003	759,003
Total.....	.....	4,024,789	4,024,789
Total craft through United States canal.....	.....	2,557	2,557
Total craft through Canadian canal.....	.....	619	619
.....	.....	3,176	3,176
Total registered tonnage through U. S. canal.....	.....	2,927,047	2,927,047
Total registered tonnage through Canadian canal....	.....	465,326	465,326
.....	.....	3,392,373	3,392,373

## MARINE PATENTS.

630,104. Apparatus for raising sunken vessels. E. G. Pettit, Zanesville, O.

630,130. Mechanism for operating bilge pumps. Frederick Stuth, Somers Point, N. J.

630,245. Oar-lock. Charles Leiding, Duluth, Minn., assignor of one-half to H. E. Smith, same place.

630,254. Form for hulls of vessels. M. F. Mithoff, New Orleans, La.

630,260. Device for cleaning hulls of ships. G. A. McLane, New York, N. Y.

630,261. Barnacle scraper. G. A. McLane, New York, N. Y.

630,457. Ship-canal. Alexander Hogeland, Louisville, Ky.

630,499. Submerged feathering-propeller. E. F. Gorman and P. F. Yost, Philadelphia, Pa.

630,542. Raising sunken vessels. Marshall Jones, Boston, Mass.

630,593. Dumping-scow. S. F. Clouser, New York, N. Y.

630,769. Fish-screen for artificial waterways. G. D. Bird, Gunnison, Colo.

630,809. Bridge. W. A. Gunn, Lexington, Ky., assignor of one-half to W. E. Gunn, Covington, Ky.

630,821. Pneumatic propulsion means. J. C. Walker, Waco, Texas.

It is computed that Chicago used 53,000,000,000 gallons of water in the past six months. Nearly one-fourth of this was for domestic purposes, and the balance for diluting the contents of the Chicago river.

## SHIPPING AND MARINE JUDICIAL DECISIONS.

(COLLABORATED ESPECIALLY FOR THE MARINE RECORD.)

Lien for Money Advanced.—The statute of Louisiana grants no lien for money advanced to the master or owners of a vessel in the home port, no matter for what purpose. Learned et al. vs. Brown et al., 94 Fed. Rep. (U. S.) 876.

Waiver of Lien—Parties who have united in a libel of intervention against a vessel do not waive their right to a lien by withdrawing such libel and filing separate libels. Learned et al. vs. Brown et al., 94 Fed. Rep. (U. S.) 876.

Harter Act.—The provisions of section 2 of the Harter act as to the limiting of liability by bills of lading or shipping documents does not apply to passenger tickets. The Kensington, 94 Fed. Rep. (U. S.) 885.

Passenger Tickets—Provisions Relating to Baggage.—A provision in a passenger ticket relating to a limitation of the carrier's liability for loss of baggage, plainly printed in the face of the ticket above the signatures of the ship's agent and the passenger, is a part of the contract. The Kensington, 94 Fed. Rep. (U. S.) 885.

Premiums for Insurance—There is no lien on a vessel, either under the general maritime law or under the code of Louisiana, for premiums due on insurance policies taken for the benefit of the owners, and from which lienholders would receive no benefit in case of loss. Learned et al. vs. Brown et al., 94 Fed. Rep. (U. S.) 876.

Damages—Excessiveness—Where both bones of the leg of a seaman were broken through negligence, and after the injury he was grossly neglected by the officers of the ship and after the injury he was grossly neglected by the officer, of the ship, and the injury was permanent and greatly damaged him in his earning capacity, damages of \$2,000 were not excessive. Lafourche Packet Co. vs. Henderson, 94 Fed. Rep. (U. S.) 871.

Collision—Suit for Damages—Parties.—A purchaser of a vessel, who had made part payment thereon, and was in lawful possession, under a covenant to keep her in good repair and running order, at the time she was injured in a collision, although the legal title remained in the vendor, may maintain a suit in admiralty to recover damages for the injury. The John B. Dallas, 94 Fed. Rep. (U. S.) 985.

State Sunday Laws—The fact that States on either side of a navigable river have in force statutes prohibiting the doing of certain kinds of work on Sunday does not relieve the owner of a bridge spanning the river from the duty of opening the draw on Sunday to admit the passage of vessels engaged in commerce on the river. Boland et al. vs. Combination Bridge Co., 94 Fed. Rep. (U. S.) 888.

Admiralty Jurisdiction—Suit for Injury to Pier.—A "pier," in the ordinary meaning of the word, is a projection of the land, and has to be treated as land for purposes of jurisdiction; hence a suit for an injury to a pier by a vessel, where the libel uses the word without any qualifying adjective, is not within the jurisdiction of a court of admiralty. The Haxby, 94 Fed. Rep. (U. S.) 1016.

Inconsistent Claims—An intervenor in a suit to enforce liens against a vessel, who claims ownership of a part of the property libeled, and obtains its release on appraisal and bond, cannot, by subsequently setting up a claim to a lien in his own behalf, become entitled to share in the proceeds of the bond and the remaining property. Hawgood & Avery Transit Co. vs. Dingman et al., 94 Fed. Rep. (U. S.) 1011.

Contract of Carriage—Provision Exempting Carrier from Liability.—Where both carrier and passengers are citizens of the United States, and the place of completion of the contract of carriage is within this country, a stipulation for exemption from liability in the contract, authorized by the law of a foreign country, by which the contract is by its terms to be governed, but which is contrary to the public policy of this country, is not enforceable in its courts. The Kensington, 94 Fed. Rep. (U. S.) 885.

Maritime Lien—Suit to Enforce—Effect of Release on Bond.—A release to a claimant under an appraisal and stipulation or bond, not made under the limited liability act, of a part of the res seized under a libel in admiralty has the same effect upon the liens upon the part released that a discharge of the entire res under a like appraisal and stipulation or bond would have had upon the liens upon the whole thing, which is to discharge the liens of those who were parties to the proceeding when the release was made, but no others. Hawgood & Avery Transit Co. vs. Dingman et al., 94 Fed. Rep. (U. S.) 1011.

Admiralty—Furniture of Vessel.—Where a dealer in musical instruments placed a piano on a steamer as an advertisement, under a verbal agreement with the captain under which it could be removed at any time, at the option of either party, such piano remained the property of the dealer, and did not become any part of the furniture of the vessel, so as to pass under a mortgage of the vessel and her apparel and furniture; nor did it pass under a sale of the vessel in admiralty as a part of her property, it having been removed by leave of court after her seizure, but before the sale. Learned et al. vs. Brown et al., 94 Fed. Rep. (U. S.)



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CLEVELAND, O., AUGUST 10, 1899.

PARTICULAR attention is directed to the views expressed on page 5 of this issue of the RECORD, by Major Symons, Corps of Engineer, U. S. A., and Mr. Geo. V. Wisner, C. E., Detroit. The subject is worthy of the closest study and adequate consideration by every member of the Lake Carriers' Association, and other interested persons, industries, etc.

EVERYONE who gives good advice earnestly, likes to see his counsel carried out in earnest. Apropos, an amphibious kind of a journal has been branding itself as a trade paper. We advised that it should travel under the cognomen of class organ. This week it has found out or discovered, that a better quoted mask to sail under, is, perhaps, marine publication. Once more, trades should never be mixed promiscuously with professions, nor vice versa.

ALL lake ports can, and do, dump their refuse in the lake. A repetition of this work from Duluth to Ogdensburg gives an economy in sanitary arrangements unknown to any other part of the world. Chicago, though, is rather checkmated, as it is located at the head of Lake Michigan and its refuse returns to the dumping place. Talk of taking back water. There is hardly a port along the chain of lakes but takes a share of the refuse of its neighbor, some, more than others.

A VERY foolish and unbusinesslike report was sent out from Chicago a few days ago to the effect that underwriter's agents here are shaking hands with themselves at the lack of casualties and the consequent pocketing of heavy premiums. Let us say that if there were no claims made there would be a diminution of premiums, also, that underwriters carrying risks may not holler until they are out of the woods. The "Soo" river collisions of today may have the effect of these agents making a different representation to their principals than their tune of last week's warblings indicated.

UNTIL a fair guess at the area of watershed contributing to the maintenance of lake levels can be made, all the evaporation meters and every other kind of measure supplied as equipment to the Weather Bureau will be found of little avail in summing up the rain-fall and run-off or take-off of the lakes. It is barely possible that Prof. Stupart, of the Dominion Meteorological Office, may have the watershed area of the north shores of Lakes Superior, Erie and Ontario, also of the east shore of Lake Huron and Georgian Bay, but we very much doubt it. There is also quite a span from Sarnia to Amherstburg through the rivers. It will be too late if we wait until there is a permanent lowering of lake levels before ascertaining just where we are at on the question of the maintenance of lake levels.

## AN APPARENTLY UNSEAWORTHY CRAFT.

A circumstance occurred on Lake Michigan last Sunday which reflected in anything but a pleasant manner upon the licensed officers of the steamer City of Grand Rapids, her owners, the surveyors who inspected, and the association that classed and rated her, as well as upon the local officers of the U. S. Steamboat Inspection Service. In this instance a great wrong was done to the traveling public, shippers and underwriters (if any), also was there a whole raft of laws, bearing upon the subject, kicked overboard, rendered null, defunct, void.

It is only by plain speaking and writing that scandalous atrocities can be rectified. Virulent diseases calls for radical cures. The RECORD notes this case in as mild terms as possible, although the careless ignorance, or penuriousness of one owner reflects on many, and it is to be hoped that the case of the City of Grand Rapids is an isolated one.

It is peculiarly within the province of the RECORD to animadvert upon the apparently loose observance of the laws which will permit a passenger steamer of questionable seaworthiness to ply on the waters of the lakes. Daily newspapers, while not loaded down to the scuppers with marine lore, practice or customs, easily recognize that there is something radically wrong when a steamer is allowed to take a crowd of passengers on the lake, and usurp the privilege of drowning them.

The entire marine fraternity, as well as the traveling public, will no doubt join the MARINE RECORD in applauding the editorial candor of the Detroit Journal of Monday last, in enunciating the following sentiment:

"The perils of both land and water travel were illustrated yesterday, and the death list of victims is unusually long. But Michigan is particularly interested in the experience of the passenger steamer, City of Grand Rapids, which went thirty-five miles into the lake to find her hull leaking like a sieve, while her pumps would not work. This looks like inspection by the United States officials that did not inspect, and the public demands a thorough investigation. The public relies, as it has a right to, on the assurance that passenger steamers in particular are not allowed out of port unless seaworthy. That a steamer may fail in a gale is something within the probabilities, despite the utmost care and the most rigid inspection; but that one should threaten the lives of all on board when the lake is calm calls for an explanation."

In stating that it was our province to call attention to such cases as the foregoing quotation succinctly amplifies, it is also our bounden duty to resent any unjust imputations which might tend to reflect in a derogatory manner on the lake marine, including those who are actively engaged in that service, and, it is a pleasure to state that an exceptional instance, such as in the case of the City of Grand Rapids, goes but to prove the rule of exceptions, and gives us the opportunity of stating at this time that there is no tonnage on the face of the earth, or rather, the waters thereof, that is any better built, found, equipped and kept up, than is the majority of tonnage on the Great Lakes.

WITH the advent of large cargo steamers, such as are now being put afloat and contracted for, it would be markedly in order for those building new docks, wharves, grain elevators, coal trestles, etc., to see that their plans were such as to accommodate the largest class of vessels. The same applies to river and harbor improvements, also dredging and towing, as well as wrecking and salvage equipment and appliances. Where the volume of trade is immensely increasing, as it is on the lakes, large vessels are found to be far and away more profitable than the medium sized craft. Hence, the ports that are safe, easy of access, and facilitates the loading and discharging of cargoes, will always be given the preference, even at the cost of slightly reduced freight rates. Attention turned in this direction now will prove of inestimable value to all general interests in the future.

IN THE formation of an international commission to deal with subjects relating exclusively to the lakes, the engineering talent must, perforce, be reckoned upon as one of, if not the strongest and most prominent feature in such a body. To the several district officers of the Corps of Engineers, U. S. A., in whose charge the conservancy and improvement of rivers and harbors are placed, too much praise can not be awarded. Representing the Federal Government, they have withstood the attacks of private interests, in their recommendations for annual improvements, and, under the chief engineer, as empowered by act of Congress, government work has been entered upon and carried to completion in a more expert, scientific and economical manner than could be encompassed by any other means.

IF the Harlem floats off Isle Royale it will no doubt be with the addition of a couple of hundred tons of cement in her bottom. Cement, is to the damaged metal hull, what pitch and oakum is to the wooden vessel. By the way, it will be quite a novel experience to drydock the Harlem if the whole bottom shell plating is bent, punctured, twisted and broken, as is now anticipated. An experience just gone through with on the other side of the Atlantic in dry docking the Peninsular and Oriental line steamer China may have to be repeated on this side in the case of the large cargo steamer Harlem. In the case of the China, large sticks of timber were rove through her bilges, and she was partly shored up from the ends of these supports.

FROM some figures, just to hand, we learn that the cost of repairs to the Holyhead (stone) breakwater only amounts to 30 cents per lineal foot per annum. Its original cost was \$815 per foot and its construction was spread over a period of 27 years. Other British works are Portland, Plymouth and Alderney, the former costing \$2.34 per foot for its upkeep, Plymouth costing \$2.16 and Alderney has averaged during eight years no less than \$10.85. The latter work is, however, exposed to the full sweep of the Atlantic, as its volume is forced up the English channel to the Islands.

THE thanks of the RECORD are due to the Commissioner of Navigation, Hon. E. T. Chamberlain, for a copy of the "Navigation Laws of the United States," revised edition. The RECORD had worked consistently and persistently for a codification of marine enactments up to date, and, the Commissioner of Navigation, evidently recognizing the utility of such a departure being taken, as well as the discretion of our advocacy, determined upon issuing in concrete form, a much deserved publication, which, with great pleasure, we place on file.

## DAMAGED CARGO.

Canadian vessels must be classed up and kept up if they want to enter into the lake trade, and deliver their cargoes in good order and condition. In the case of the Myles arrived at Kingston from Duluth, Lloyd's agent examined the cargo of the steamer, which consisted of 50,000 bushels of corn, and found it was all damaged. The corn was shipped from Duluth by Lohrke & Co., of New York, and Lloyd's agent is quoted as saying that the corn was damaged when it was shipped from Duluth, and expresses the opinion that owing to rains in the Western States, the corn was damp and soggy when stored. The cargo in question was shipped by the Barnum Grain Co., Duluth, which says that the grain was in no such condition as described when shipped. The company says that the corn was No. 3 and No. 4 and no grade mixed, and was of fair quality and condition for these grades. Lloyd's agent held that the steamer was not responsible, and the corn was ordered sold.

Whichever way the case is ultimately determined, no good comes from landing damaged cargo, especially if received in good order and condition, as per bill of lading. The Myles is a good vessel, and the survey of Lloyd's agent is, no doubt, in accordance with his certificate, at the same time, better care should have been exercised in receiving for the consignment.

## DETROIT RIVER MAIL SERVICE.

That the United States marine mail service at Detroit is an important adjunct of lake traffic is shown by the report of the business transacted at the Detroit marine postoffice during the month of July, 1899. The growth of the service is shown by a comparison with the same month in 1898.

There were received from passing vessels in July 12,161 letters, and in the same time a year ago 8,525. This shows an increase of 42.65 per cent. The July, 1899, deliveries were 30,106 letters and packages, as compared with 25,740 in 1898, an increase of 16.95 per cent.

The up-river, or "Flats," service handled 24,446 pieces this July, and 19,067 last year during the same period, making an increase of 28 per cent.

## A CANADIAN STEAMSHIP LINE.

Application has been made to the Canadian government for a charter for the Quebec, Hamilton and Fort William Navigation Co., with a capital stock of \$1,000,000. The company will commence building two steamships at Hamilton this year and construct others later on. They propose to engage in both freight and passenger business.

## LAKE FREIGHTS.

Our freight report this week must again announce iron ore as king, and fifteen million tons expected to be carried for the season. Last week we stated that \$1 was the rate from the head of the lakes, since which time it has advanced nickel by nickel up to \$1.15, and even for an advance charter up to \$1.30 November delivery; Marquette free at \$1, and Escanaba 80 cents, with prospects of a still further raise of 5 cents within the next few days, but brokers are short of tonnage even at fancy figures, and it may be, that the 1895 splurge, when ore went to \$2, may repeat itself before this season is ended.

Coal rates are just as owners wish to make them, but the going rate is 55 cents to Lake Superior and 60 cents wanted. Lake Michigan 70 cents with a raise of 5 cents indicated and no chartering ahead, as free tonnage, that is, bottoms that are open to charter are very scarce. These are the best figures paid on coal for several years past.

The grain rate, corn, Chicago to Buffalo, has been fluctuating all week between  $2\frac{1}{2}$  and  $2\frac{3}{4}$  cents and even up to  $2\frac{1}{2}$  cents, with fairly lively chartering,  $3\frac{1}{2}$  cents is expected from Duluth this month, although  $3\frac{1}{4}$  cents is now called the going rate and  $3\frac{1}{2}$  cents for next month. It is reported that a Chicago agent offered M. A. Bradley \$11,500 for the steamer Sarah E. Sheldon for the balance of the season, the shipper to pay all expenses of handling cargoes. Mr. Bradley held for \$2,000 more, this, however, is only a rumor and not likely to be correct.

The major portion of lake tonnage being placed on season charters leaves a little better picking, for, say, the 20 per cent. that is free to fix from trip to trip, hence, the increase in general rates on bulk cargoes such as coal, ore, grain and lumber. When the season charters expire, which will be towards the end of this month, there may be a lively time experienced in the freight market and all present indications point to the vessel owner coming out on the right side of the ledger before the close of navigation.

## CANAL TO THE COAST.

Plans for the great project of building a ship canal connecting the Great Lakes and the Atlantic by way of the Hudson and Mohawk rivers and including a waterway connecting Lake Ontario and Lake Erie, are now nearly concluded. The subject will come up for consideration at the next session of Congress. The ship canal will be one of the greatest in cost and in the magnitude of its engineering problems that ever has been undertaken by this country. The project is to cut a canal 30 feet deep and 340 feet wide from Lake Erie to Lake Ontario around Niagara Falls, leaving Lake Ontario at Oswego, through the Oswego river to Oneida lake, thence through the Mohawk to the Hudson river. A single lock will be 1,000 feet long, with walls over fifty feet high. It will be three and a half times the depth and five times the width of the Erie canal. To supply the necessary water to the summit level, which is at the city of Rome, it is estimated that it will require ten times as much as flows in the Genesee river in a dry season. To secure such a volume of water from the New York streams, the plans show a great dam at Carthage, on the Black river, making a lake covering eighty square miles. It will be great enough to control the whole flow of the Black river and secure a tremendous increase to the water power of the manufacturing interests in that part of New York State. It will also supply to the ship canal more water than the Genesee could yield by any system of storage. From this reservoir, a canal ninety miles long, as large as the Erie, will be built to the proposed ship canal just west of Rome, and on the way down a second reservoir will be constructed in the Salmon river. This feeder canal will require the excavating of more than 20,000,000 cubic yards of earth and rock.

INTERESTING tests are being made in New York harbor in wireless telegraphy at the United States Light-house Depot at Tompkinsville, Staten Island, under the direction of Col. David P. Heap, the engineer officer in charge of the third light-house district. It is intended to further experiment by the sending of messages from Tompkinsville to Coney Island, and if this experiment succeeds experiments will follow with the Scotland, Sandy Hook and Fire Island light-ships, and the Navesink lights, Romer shoal beacon and other lights about that harbor. Mr. W. F. Clarke, the electrician in charge of the experiments, expects to send messages across the forty miles between the Tompkinsville station and the Fire Island light-ship.

## TRANSPORTING THE WHEAT PRODUCT.

The Great Northern and Northern Pacific railroads are preparing to handle a heavy wheat business this fall. Both roads have placed orders for a number of new grain cars, and an increased capacity in anticipation of a heavy movement of grain to the head of the lakes, with the beginning of harvest. Last year's wheat business taxed the operating departments of both roads, and additional preparations were found necessary this year. The Great Northern has placed an order for 900 grain doors for freight cars, with one firm, and has manufactured during the spring and summer, a large number of grain cars of the largest capacity of any in use in the west. The larger number of these were built in the St. Cloud shops and are almost twice as long as the ordinary freight cars and have two doors on a side.

Freight officials of the western roads expect that the movement of wheat will begin about the middle of August. Harvesting in southern Minnesota will commence the latter part of this week, and will be a week later in South Dakota. In North Dakota it is expected that threshing will begin about Aug. 20. In North Dakota grain will begin to come into the elevators about Aug. 30, and from that time until snow flies both the Great Northern and Northern Pacific will have all the business they can handle.

## LAKE SUPERIOR-MISSISSIPPI CANAL.

A report made by Major Clinton B. Sears, Corps of Engineers, U. S. Army, stationed at Duluth, on the feasibility and cost of a canal to connect Lake Superior with the Mississippi river at its junction with the St. Croix river, has been forwarded to the War Department. The examination and survey was made by Assistant Engineer Krey and the substance of the report is that a canal over the route proposed is feasible, but is not an urgent public necessity. It would cost about \$6,000,000 and require 24 locks, the probable annual cost of operating and maintaining of which would be \$350,000. Canal boats drawing four feet of water only could be used.

Major Sears, in summing up the report, which is made in pursuance of an act of the last Congress, says that it is a work that should not be undertaken by the government. One of the reasons given is that there are four lines of competing railroad through the territory to be traversed, and the shortness of the navigation season makes it unlikely that the canal would hold down freight rates for the greater part of the year.

## TRANSATLANTIC LAKE TRADE.

William W. Bates, ex-commissioner of navigation, writes the following regarding the first direct shipment of wheat to Europe:

"Having read the statement of Capt. Andrews that Capt. I. T. Morris, of Chicago, in the schooner Correspondence, carried the first direct shipment of wheat to Europe in 1858, I desire to say that the schooner Dean Richmond sailed direct, either in 1854 or 1855, to Liverpool and opened this trade. I got from Mr. Richmond, at his office in Chicago, full particulars of the voyage at the time, and afterwards got from the builders at Cleveland the lines of the vessel, and published the whole in the National Magazine and Naval Journal, of New York, of which I was co-editor and proprietor. Mr. Richmond was not long in finding out that such vessels as could then make the trip were too small to be successful carriers."

## VESSELS CLASSED.

Vessels classed and rated by the American Bureau of Shipping, New York, in the "Record of American and Foreign Shipping;" Screw steamer, Eugene Grasselli, owned by Grasselli Chemical Co.; screw, Lykens, owned by Philadelphia & Reading R. R. Co.; screw El Sud, owned by Southern Pacific Co.; screw, New York, owned by Wm. P. Clyde & Co.; ship, Isaac Reed; ship, R. D. Rice; barge, C. R. R. of N. J., No. 8; Mexican screw, Juno, owned by N. Y. & Cuba Mail S. S. Co.; Mexican screw, Hebe, owned by N. Y. & Cuba Mail S. S. Co.

MESABA ores, it is said, are growing in favor with furnace men. The American Steel & Wire Co., it is understood, will use 70 per cent. of Mesaba ores in their furnace next year. The troubles that the furnace men had at first with ores taken from the Mesaba were many, but by careful experiments the difficulties have largely been overcome and today but few objections are made to the ore.

## HEROIC RESCUE.

Capt. Read, master of the Canadian schooner Wawanosh, in tow of steamer Ontario, while loading last trip at Nipigon river, Lake Superior, performed an act which is worthy of public recognition. A man who was helping to load the vessel accidentally fell overboard, being hit by a stick of timber in his fall. He sank instantly and rose once nearly to the surface of the water. The captain saw that the man would drown if he did not get help. The captain plunged in after him, saw and caught him by the top of the head. The drowning man had a tight cap on and in being raised to the surface the cap slipped from his head; he went down again like a stone. The captain followed, and this time caught him by the hair and brought him to the surface. They were then thrown a line and the two men pulled on board. The man came to and in a few hours was not much the worse for his close call.

## LETTERS AT DETROIT MARINE POST OFFICE

AUGUST 9, 1899.

To get any of these letters, addressees or their authorized agents will apply at the general delivery window or write to the postmaster at Detroit, calling for "advertised" matter, giving the date of this list and paying one cent.

Advertised matter is previously held one week awaiting delivery. It is held two weeks before it goes to the Dead Letter Office at Washington, D. C.

Barnes, Vernon S., Gogebic	Ladue, Guss, Birckhead
Bertrand, Harry	LaForge, Miss Lillian, Commerce
Babbitt, H. L., Raleigh	Lince, Frederick
Baker, James F.	Loughway, O.
Bryant, Mrs. W.	Larmie, L., Extinguisher
Crothers, Mrs. Jas.	Lafountaine Thos.
Canfield, Chas. H., Cumberland	Mickleham, Thos.
Cannon, T. J.	Moore, James, Sailor Boy
DeMill, Albert	Mitchell, John, North Land
Douglas, Louis	Manthi, Fred, City of Glasgow
Evans, John, Birckhead	Monroe, Chas.
Eaton, H. C., Marquette	MacDonald, Hugh, Whitworth
Fitzgerald, W. J.	McElroy, Ed., Shenandoah
Fink, Guy, A. P. Wright	Payne, J. A.
Fairback, Oliver P., Polynesia	Parks, Geo. L.
Goodwin, Frank	Pate, James, Pontiac
Goulet, Joe, Fedora	Sauve, Jos. Bene, Australia
Holtz, Fred, Cumberland	Slavin, John, Centurion
Holtz, Geo., Bangor	Snyder, G. A.
Halfman, Wm. G.	Stevenson, Mrs. Alice
Harden, George	Secord, J. M.
Joseph, Wm.	Tenison, Mrs. Nellie, Wand
King, Frank W., Pringle	Tobin, Dick
Keeler, C. B.	Wills, Geo. H.
Kelly, Mrs. Thos.	

MADAME Gustave Paraf, Madame Richelot, and Madame Ostheimer, three Parisians who lost near relations in La Bourgogne disaster, have sent \$30,000 to the United States Government, \$20,000 of which is to be given as a prize to the inventor of the best life-saving appliance, and the other \$10,000 is to be spent in bringing the competition to the notice of inventors in various parts of the world.

WHEN it is said that the mud and sand to be removed from the New York harbor to make the new channel to the sea, if deposited in the East river, would be sufficient to make the river dry land from shore to shore and from the Battery to Hell Gate, some idea of the size of the colossal undertaking may be obtained. It is estimated that nearly 50,000,000 tons of mud and sand must be removed in order to make the East Channel 40 feet deep and 2,000 feet wide. Congress has appropriated the money, the engineers have drawn the plans, and contracts are being awarded. In order to make the channel it is considered necessary to build new dredges, which will draw up the sand by means of suction pumps. These dredges will be 320 feet long and nearly 48 feet wide, and will have a capacity of 8,000 tons an hour. It will take a year to build the dredges and probably two years more to do the work. The engineer of the Mersey Dock Board recently described the progress of work at the Mersey bar by means of the two huge pump dredges built at Barrow-in-Furness. Whereas at the commencement, in 1890, the shallowest water across the bar was 11 ft. at low water of spring tides, there is now a channel of 1500 ft. in width, having practically no less than 27 ft. of water in any part on the same condition of tide. The amount of sand which had to be removed from the bar itself in order to effect this has been 22 $\frac{1}{2}$  million tons, and from the bar and main channel 41 $\frac{1}{2}$  million tons.

## Almy's Patent Sectional WATER TUBE BOILERS.

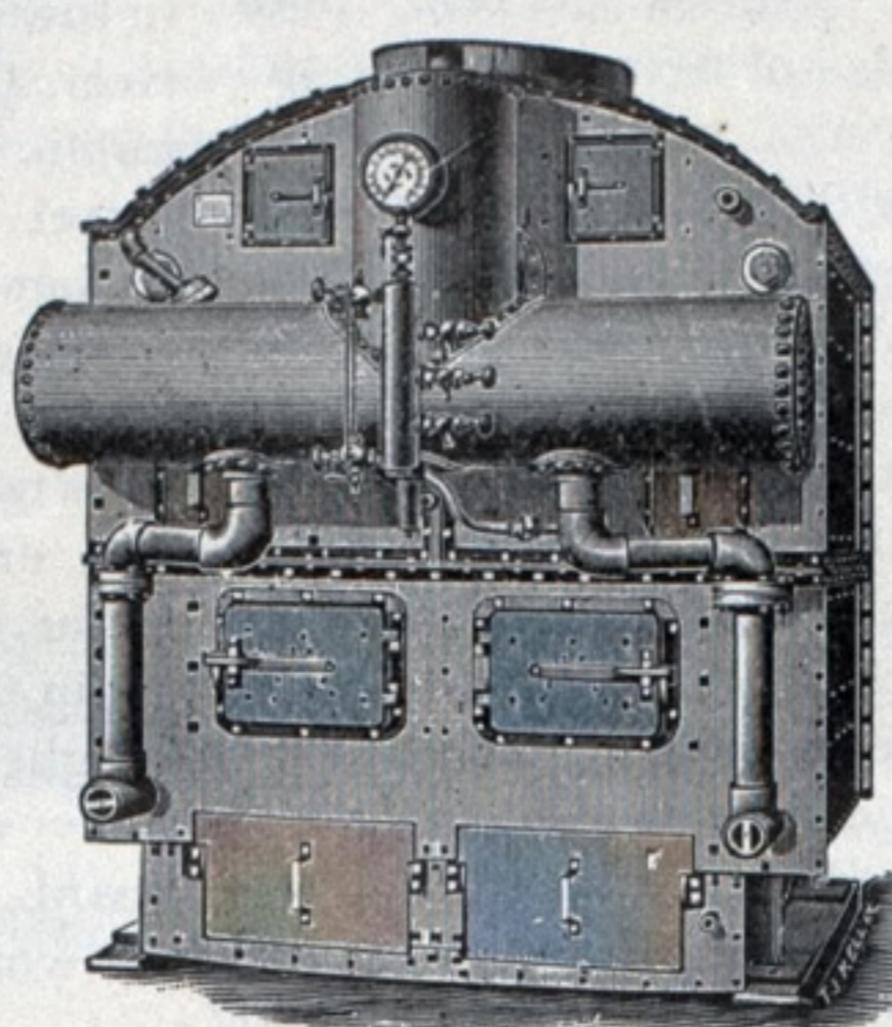
NOW USED IN

21 Passenger Boats from 70 to 160 ft. long.  
61 Steam Yachts from 50 to 180 ft. long.

U. S. TORPEDO BOAT "STILETTO."

Numerous freight and fishing steamers, launches and stationary boilers are giving most excellent results.

ALMY WATER TUBE BOILER CO.,  
178-184 Allens Ave., near Rhodes St., PROVIDENCE, R. I.



### LAUNCH OF THE MALIETOA.

Saturday, August 5, was quite a record day for the American Ship Building Co.'s plants at Cleveland, each of which successfully launched a large steel cargo steamer.

It is, perhaps, stretching the bow a little, to tag on the Lorain plant in this municipality, and yet it seems but a continuous street car ride to reach Lorain from Cleveland, that is, you simply ride to the end of the line, say for about an hour, and then step off at one of the best equipped shipyards to be found in the world, or at least, good authority has so stated and classed it.

Promptly at 3 o'clock and in the presence of upwards of 2,000 people, the large steel steamer Malietoa, built at Lorain to the order of the Minnesota Steamship Co., Cleveland, left the ways and took her virgin plunge under the auspicious hand of her christener, and therefore, godmother, Miss Nellie Mallory, daughter of Capt. George Mallory, commodore of the fleet owned by the Minnesota Steamship Co., Cleveland.

Those who imagine that the lakes of North America are something after the order of duck ponds, will be surprised to learn that the Malietoa is one of the largest, most powerful and best equipped cargo steamers ever built. Her general dimensions are 474 feet over all, 454 feet keel, 50 feet beam, and 29 feet molded depth. Her engines are quadruple expansion, with cylinders 15 1/4, 25 1/2, 38 and 57 inches by 40 inches stroke, and she is to be equipped with a battery of tubulous boilers. She will carry 8,000 tons on the best draft found in the connecting waters of the lakes.

As usual, on the lakes, the Malietoa was launched sideways, and in about half an hour after the hull was water-borne, she was towed out of the slip and placed under the sheer-legs to receive her machinery and other heavy equipment, as no time is to be lost in getting her ready to load cargo.

Among those who attended the launch, were Mr. Robert Wallace, Mr. Luther Allen, Mr. W. D. Rees, Mr. R. C. Wetmore, Mrs. J. C. Garrett, Mr. S. C. Oviatt, Mrs. Lucy Oviatt, Miss Nellie Mallory, Capt. George Mallory, Mr. J. C. Wallace, Mr. B. B. Wallace, Mr. C. B. Squire, Mr. J. C. Brooks, Mr. Dalton, Mr. B. Dennison, Mr. W. B. Hasbrook, Mr. Robert Logan, Mr. Edward Porritt, American correspondent of the Glasgow Herald, Mr. J. H. Hoyt, Mr. Hay, Mr. Arendt Angstrom, Toronto. A large number of visitors from the villages around Lorain took advantage of the elegant weather to witness the launch of the largest vessel ever built in Ohio, and it was a gala, also a red letter day around the shipyard.

Capt. George Mallory, who always takes charge of the last new boat built for the Minnesota Steamship Co., will superintend the equipment and take command of the Malietoa.

### HISTORY OF THE LAKES.

When we learned that the "History of the Great Lakes" was to be published by J. H. Beers & Co., of Chicago, it was safe to assume that the mechanical part of it, the workmanship, that is typography and binding, would be the best that that enterprising firm could produce, but the result exceeds our anticipations, as the two volumes before us amply verify.

The mechanical work on the history is perfect, and should be an ornament in any house, making a library in itself, as regards lake literature. The numerous plates—steel, photogravure and half-tone, have been acknowledged in some

cases, as being improvements on the original photographs, and are so well executed that no fault may be found with them.

The matter contained in the history covers every point of episode and historical incident from the time the lakes were discovered, in 1678, to the present day, in chronological sequence. Considering the lapse of years since history was first made on the lakes, it is surprising that so much of the old legendary history could have been presented at this late day. Much of the success of this research is owing to A. A. Pomeroy, formerly of the MARINE RECORD, and Capt. J. W. Hall, (deceased), of Detroit, for a long time correspondent of the MARINE RECORD.

It has been the object of Messrs. Beers & Co., in their "History of the Lakes," to incorporate in this fine two volume work, all of the episodes, adventures and casualties that have occurred on the lakes during the last two hundred and twenty years, and it is only in rare instances that they have failed. The history contains in short paragraphs, notice of each vessel that has ever been built on the lakes, and the greater casualties, involving serious loss of life, are given in detail.

Messrs. J. H. Beers & Co. have taken much care and gone to great expense to make this history as complete and accurate as is possible at this late date, and have included in it matters of interest that come before the marine public.

The biographical part of the history includes the career of the greater part of the officers making history for the present generation, the doings of the Life-Saving Service, and other matters pertaining to individual marine interests. The Cleveland Leader is pleased to say, in its issue of Sunday, August 8, that the "History of the Lakes" has proven a great surprise from the fact that it so far excels in literary quality anything they had expected possible. Its diction, the point in which we are most particular, being fully up to the mark, and it can be thus judged by the readers, all of whom are certainly intelligent people.

### VISIBLE SUPPLY OF GRAIN

As compiled for THE MARINE RECORD, by George F. Stone  
Secretary Chicago Board of Trade.

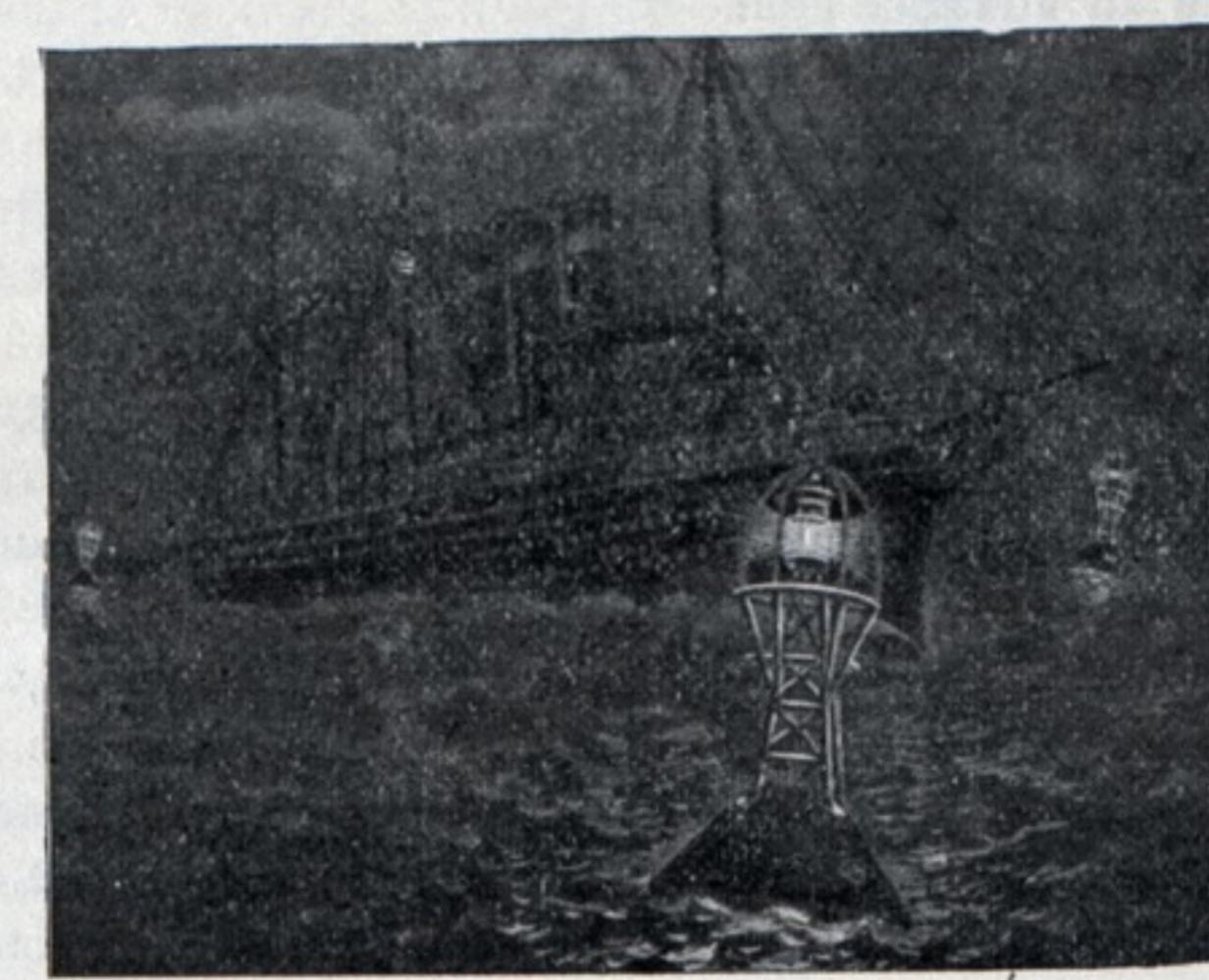
CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY. Bushels.
Buffalo.....	1,600,000	335,000	261,000	72,000	109,000
Chicago.....	5,819,000	2,503,000	1,143,000	150,000	5,000
Detroit.....	349,000	30,000	9,000	8,000	.....
Duluth.....	4,105,000	227,000	90,000	43,000	20,000
Fort William, Ont.....	1,750,000	.....	.....	.....	.....
Milwaukee.....	58,000	3,000	.....	.....	10,000
Port Arthur, Ont.....	250,000	.....	.....	.....	.....
Toledo.....	1,925,000	685,000	61,000	6,000	.....
Toronto.....	68,000	.....	10,000	.....	13,000
On Canal.....	730,000	43,000	433,000	.....	90,000
On Lakes.....	488,000	1,365,000	735,000	102,000	65,000
Grand Total.....	37,166,000	10,461,000	4,511,000	593,000	416,000
Corresponding Date, 1898.....	8,254,000	17,920,000	3,352,000	437,000	298,000
Increase.....	1,147,000	.....	717,000	6,000	.....
Decrease.....	1,185,000	.....	.....	.....	116,000

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

Assumption of Risk.—A seaman does not assume the risk involved in the use, under orders, of patently defective appliances furnished him by the master. Lafourche Packet Co., vs. Henderson, 94 Fed. Rep. (U. S.) 871.

## Pintsch Gas Lighted Buoys.

Adopted by the English, German, French, Russian, Italian, and United States Light-House Departments for channel and harbor lighting. Over 800 gas buoys and gas beacons in service.



### Burn Continuously

from 80 to 365 days and nights without attention, and can be seen a distance of six miles.

Controlled by

THE SAFETY CAR HEATING  
AND LIGHTING CO.

160 Broadway, New York City.

### A SAILORS' HOME IN CHICAGO.

In the majority of instances, the "I will" of Chicago is worthy of emulation. There is no undue modesty about Chicago, never was and perhaps never will be. Chicagoans as a rule, originate, then inaugurate, pursue and ultimately accomplish what they set out to do. They find out that they are right, then its a case of go ahead, as witness the more or less successful termination of the great World's Fair.

A wholesome universal maxim is not to throw away advantageous opportunities, Chicago never does. An earnest striving after the right, a desire to advance is always commendable and never more so than when traveling in the sphere of humanitarianism.

The foregoing is but a prelude to announcing the thoughtful and noble work just undertaken by some of Chicago's prominent citizens. The following letter which is self explanatory, was duly forwarded after being signed by Mr. Luther Laflin Mills, Gen. John McNulta and others. In addition to this, a number of letters from personal friends were sent to the Admiral, all intent upon enlisting his sympathies in the successful organization and establishment of this humane and beneficent institution in behalf of the aged and incapacitated lake seamen.

CHICAGO, JULY 21, 1899.

Admiral George Dewey, Cruiser Olympia:

SIR:—As you are aware, a movement has been inaugurated throughout our country whose object is the presentation to you of a residence in your native land by the people whom you have served so gloriously and to whom you are a worthy idol of their hearts. It is reported, however, (apparently on authority) in several of our newspapers, that your personal preference would favor a testimonial of a different character and that you would rather see, instead of the gift suggested, a Home for Sailors established by public contributions in some appropriate place in the United States, which should serve as an expression of the sentiments of your countrymen towards yourself.

On the assumption of the correctness of this statement of your views, we beg to intrude upon your attention with the request that before you reach a conclusion the suggestion of which to our people would naturally determine the matter, as to where such an institution should be established, you allow the citizens residing in Chicago to offer for your consideration their reasons for thinking that it should be located in that city—the greatest inland port in America, where twenty two thousand sailors have their headquarters.

We are informed that nearly every sea-port of any magnitude in the country has a Sailors' Home. Chicago has none, outside of the Federal Marine Hospital, whose only purpose as we understand its object is to temporarily care for the injured and sick.

After your arrival in the U. S. and at a time when it will suit your convenience for us to do so, we shall be glad to address you more fully on this important and humane subject, and with sentiments of the profoundest respect we subscribe ourselves your obedient servants.

SOME experiments were made at sea by Captain Gathemann, of the North German Lloyd steamship Oldenburg, to determine the respective effect of oil and soap and water on a heavy and broken sea. The soap and water was composed of 7.5 kilos. (16.5 lbs.) of green soap to 40 litres (8.8 gals.) of water. The Oldenburg is 132.6 metres (435 ft.) long, and the oil or soap and water was 24 metres (79 ft.) from the stem, when the ship was traveling at the speed of about 12.5 knots. The oil used amounted to about 1.25 kilos. (2.7 lbs.) per hour and was most effective; the soap and water proved quite useless.

## LAUNCH OF THE H. C. FRICK.

The steel cargo steamer H. C. Frick, built to the order of the Cleveland Steamship Co., Capt. John Mitchell managing owner, was successfully launched from the yards of the American Ship Building Co., at Cleveland, on Saturday afternoon.

As usual with all launches at this, the old Globe yards, the launch was held until exactly three hours after the sun had passed the meridian of the shipyard, when the christening ceremony was gracefully performed by Miss Elizabeth Morris, promptly on time, also with eclat and champagne, in the presence of nearly 3,000 people.

The general dimensions of the H. C. Frick are 436 feet overall, 416 feet keel, 50 feet beam and 28½ feet deep. Her engines are triple-expansion, cylinders 23, 37½ and 63 inches by 42-inch stroke. Steam will be furnished by three Scotch type boilers, 12½ feet in diameter and 12 feet long. She will be ready for service Oct. 1 and her owners expect that she will make at least six trips to the head of Lake Superior before the close of navigation. The Frick will carry 6,000 tons of ore or 225,000 bushels of wheat on 18 ft. draft of water. Capt. Chas. B. Galton, master of the steamer H. S. Holden, will command the Frick and William Fetting will be chief engineer.

On the launching platform as the Frick left the ways, were Miss Elizabeth Morris, Mr. and Mrs. Philip Morris, Mr. and Mrs. William M. Lane, of Lancaster, Pa., Mr. Frederick Lane, of Akron, Capt. John Mitchell, Miss Hale, Mr. Lawrence Robbins, Mr. and Mrs. John F. Wedow, Misses Elizabeth Wedow, Florence Wedow, Ella Wedow, Mrs. Sanford, Mr. and Mrs. W. A. Skinkel, Mrs. Dr. Cummer and daughter. A large number of local marine men also witnessed the launch.

## A HUMOROUS FORECAST 999 YEARS HENCE.

Mr. Vanderbilt, of the New York Central, has made a covenant with the Boston & Albany, covering a period of 1,000 years, less one. It is quite a stretch of time. It might be said a railroad arrangement connecting time and eternity. When this 999-year contract runs out there will be very few of us left—very few. By that time there will have been some changes upon the face of the earth, for many of the things and institutions which we now know will have passed away. When the lease expires the New York Central trains will be running between Albany and Boston without steam, electricity or liquid air. The single rail tracks will cross no highways or avenue at grade. Boston will be contiguous to Albany by the existing schedule. The New York Central's chief competitor will be the Aerial Transit Co., cutting the journey down to minutes and affording an unsurpassed bird's-eye view of the Berkshire Hills. When the

lease expires the Boston bean joke will have been inurned for centuries; the anathematizing of the anti-imperialists will not be entirely abandoned, but nearly so; the Albany capitol will be approaching completion and the image venders will show the bust of Roosevelt in their Parthenon. Lobbyists may arrange with the cashier at the state house door for the influence of such legislators as have not been engaged. When the lease runs out 2898 Manhattan may have rapid transit and fair local government; but good citizens should not expect too much all at once.—Detroit Free Press.

## SUN'S AMPLITUDES.

The following approximate amplitudes of the Sun's rising will be given each week in this column during the season of navigation. A second bearing may be taken by compass at sunset, by reversing the east bearing given for the nearest latitude, as the change in declination for a few hours makes but a slight difference in the true bearing of the Sun's setting. The bearing may be taken when the Sun's center is on the horizon, rising or setting. The three elements which may be obtained by taking these amplitudes are the quantities known as local attraction, variation and deviation.

## LAKE ERIE AND S. END LAKE MICHIGAN, LAT. 42° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
Aug. 12.....	E. 20° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 14.....	E. 19° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 16.....	E. 19° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 18.....	E. 17° N.	= N. 6½ E.	= E. by N. ½ N.

LAKE ONTARIO, S. END HURON AND CENTRAL PORTION  
LAKE MICHIGAN, LAT. 44° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
Aug. 12.....	E. 21° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 14.....	E. 20° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 16.....	E. 19° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 18.....	E. 18° N.	= N. 6¾ E.	= E. by N. ¾ N.

## N. END LAKES HURON AND MICHIGAN, LAT. 46° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
Aug. 12.....	E. 21° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 14.....	E. 20° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 16.....	E. 19° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 18.....	E. 18° N.	= N. 6¾ E.	= E. by N. ¾ N.

## LAKE SUPERIOR, LAT. 48° N.

Sunrise.	Amplitudes.	Bearing P'ts.	Bearing Comp.
Aug. 12.....	E. 22° N.	= N. 6 E.	= E. N. E.
Aug. 14.....	E. 22° N.	= N. 6 E.	= E. N. E.
Aug. 16.....	E. 21° N.	= N. 6½ E.	= E. by N. ¾ N.
Aug. 18.....	E. 19° N.	= N. 6½ E.	= E. by N. ¾ N.

With a compass correct magnetic, the difference between the observed and true bearing or amplitude will be the variation for the locality. Should there be any deviation on the course the vessel is heading at the time of taking the bearing, the difference between the observed and the true amplitude after the variation is applied will be the amount of deviation on that course. If the correct magnetic bearing is to the right of the compass bearing, the deviation is easterly, if to the left, the deviation is westerly.

## CIVIL SERVICE EXAMINATIONS.

INSPECTOR OF HULLS, INSPECTOR OF BOILERS—STEAMBOAT INSPECTION SERVICE.

The United States Civil Service Commission announces that on October 17-18, 1899, examination may be taken at any city in the United States where the Commission has a board of examiners, for the positions of Inspector of Hulls and Inspector of Boilers, Steamboat Inspection Service.

Applicants for this examination must be within the ages of twenty-five (25) and fifty-five (55) years of age. Applicants for the position of Inspector of Boilers must be physically able to enter a boiler through a manhole nine by fifteen (9x15) inches.

From the eligibles resulting from this examination certification will be made to fill the positions of Inspector of Hulls and Inspector of Boilers, Steamboat Inspection Service, District of Charleston, S. C., at a salary of \$1,500 per annum.

ASSISTANT DRAFTSMAN, ORDNANCE DEPARTMENT, SEPTEMBER 5-6, 1899.

The United States Civil Service Commission announces that on Sept. 5th and 6th, 1899, examination may be taken at any city in the United States where it has a Board of examiners, for the position of Assistant Draftsman, Ordnance Service.

The age limit for entrance to this examination are as follows: minimum, 20 years, maximum, no limit.

From the eligibles resulting from this examination certification will be made to fill the position of Assistant Draftsman, Ordnance Department, Washington Navy Yard, Washington, D. C., at a salary of \$772 per annum.

This examination is open to all citizens of the United States who comply with the requirements. They will be examined, graded and certified, with entire impartiality and wholly without regard to any consideration save their ability as shown by the grade given them in the examination.

Persons desiring to compete should at once apply to the United States Civil Service Commission, Washington, D. C., for application blanks (Forms 304 and 375,) which should be properly executed and promptly filed with the Commission, at Washington, D. C.

THE spontaneous combustion of coal has formed the subject of experiments at the hands of the United States Admiralty. The ignition of coals may be induced by condensation and absorption of the oxygen of the air by the coal, whereby the temperature is raised so high that chemical combination between the hydrogen and oxygen can take place. This easily happens if the coal is very pure and brittle, if the outside temperature be also high, and the necessary ventilation be wanting. Another cause of ignition is the action of moisture on the sulphur of many pyritous coals, not so much from the heat of the chemical reaction as from the circumstances that the coal is split and broken up, and so fitted for the absorption of oxygen. On land it is mostly pyritous coal that fires. Care must be taken that the coals are stored on iron floors and covered, the height of the heap not exceeding 6½ ft. to 8 ft., and steam pipes and flues being at least 20 ft. away. For sea voyages the coal should not be laden earlier than one month after it has been mined. These recommendations apply only to bituminous coals.

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LA SALLE & CO., Board of Trade Building, Duluth, Minn.

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INCORPORATED 1899.

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Application for the services of surveyors of this Association may be made to either the Chicago or New York offices.

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Its cost is a little more than  
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use only one-third the quan-  
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coal (?) of \$ to make steam.

The only reliable Jet Pump  
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A No. 7 Pump, costing  
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through 50 feet  
of hose and  
throw a  $\frac{3}{4}$ -inch  
solid stream of  
water 75 feet  
from end of nozzle without  
fail as long as there is water  
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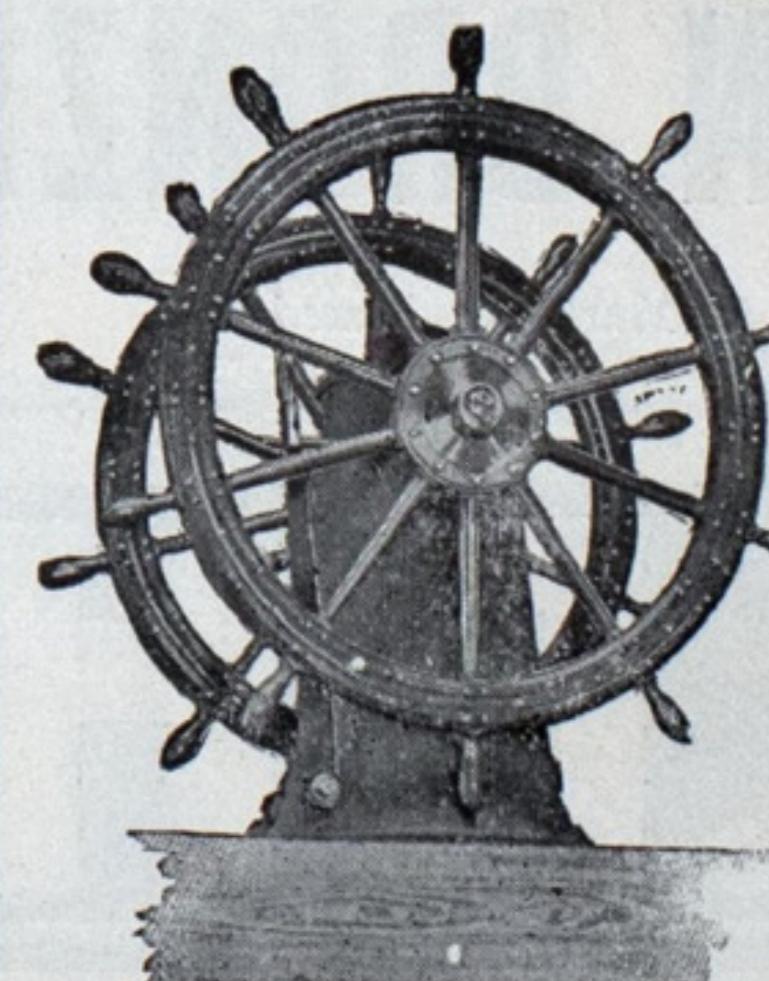
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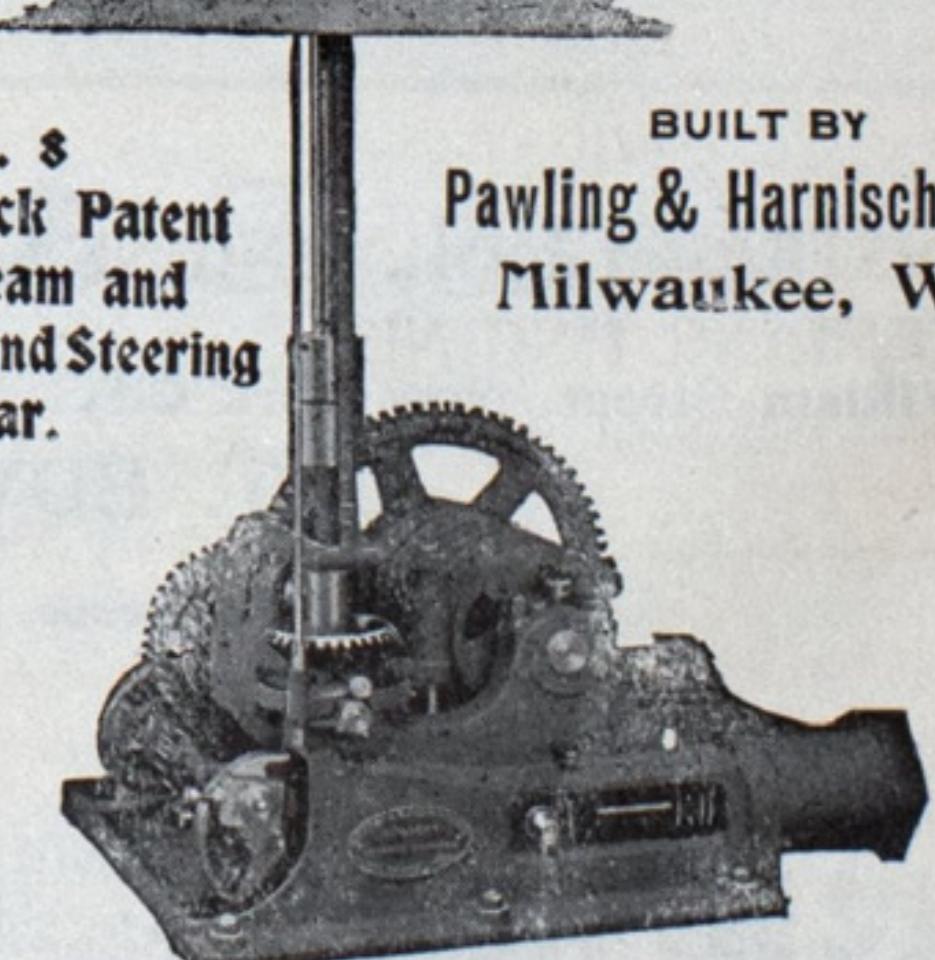
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Simplest,  
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back by one  
lever in less  
than one  
Second.



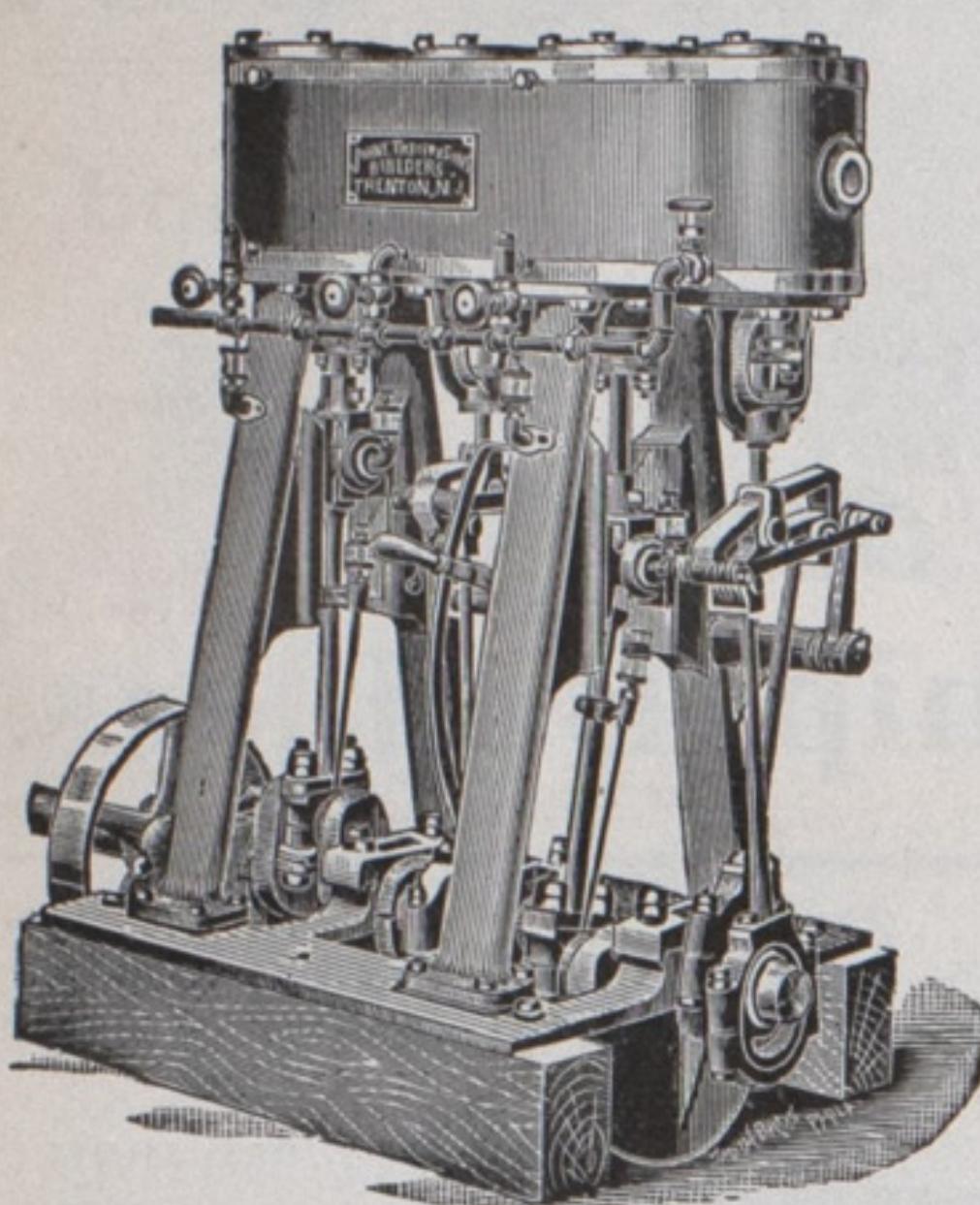
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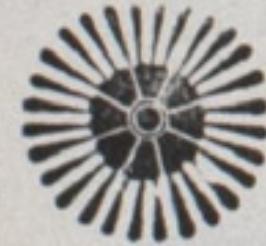
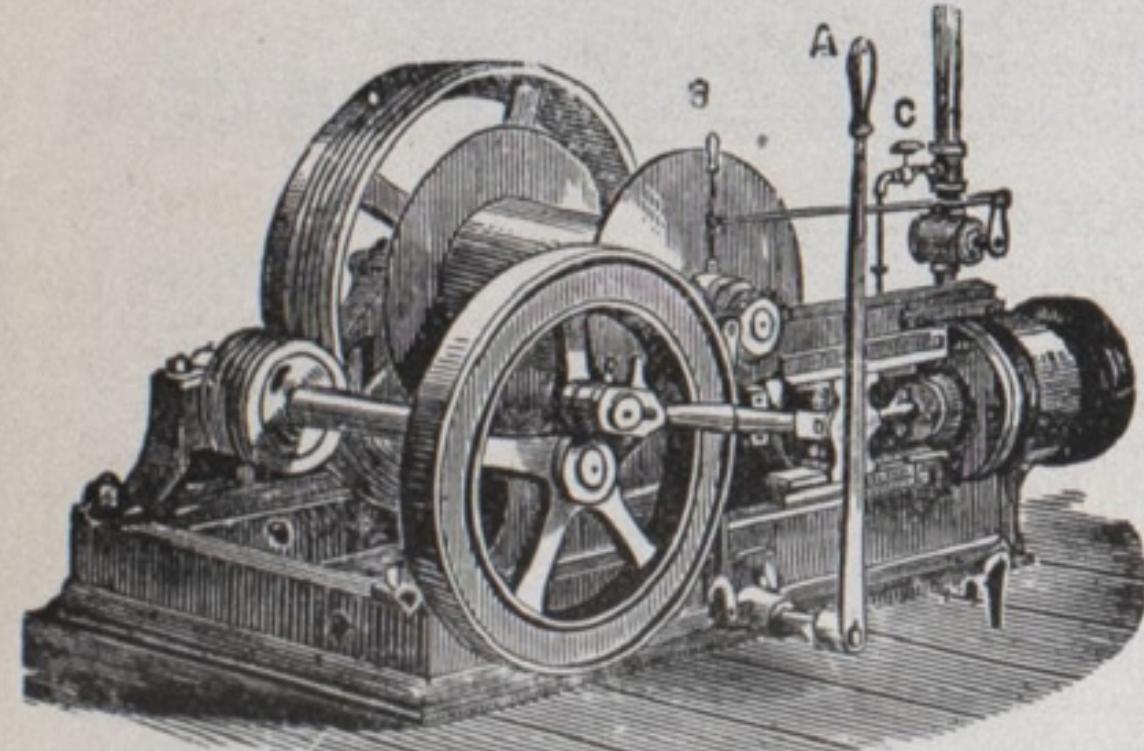
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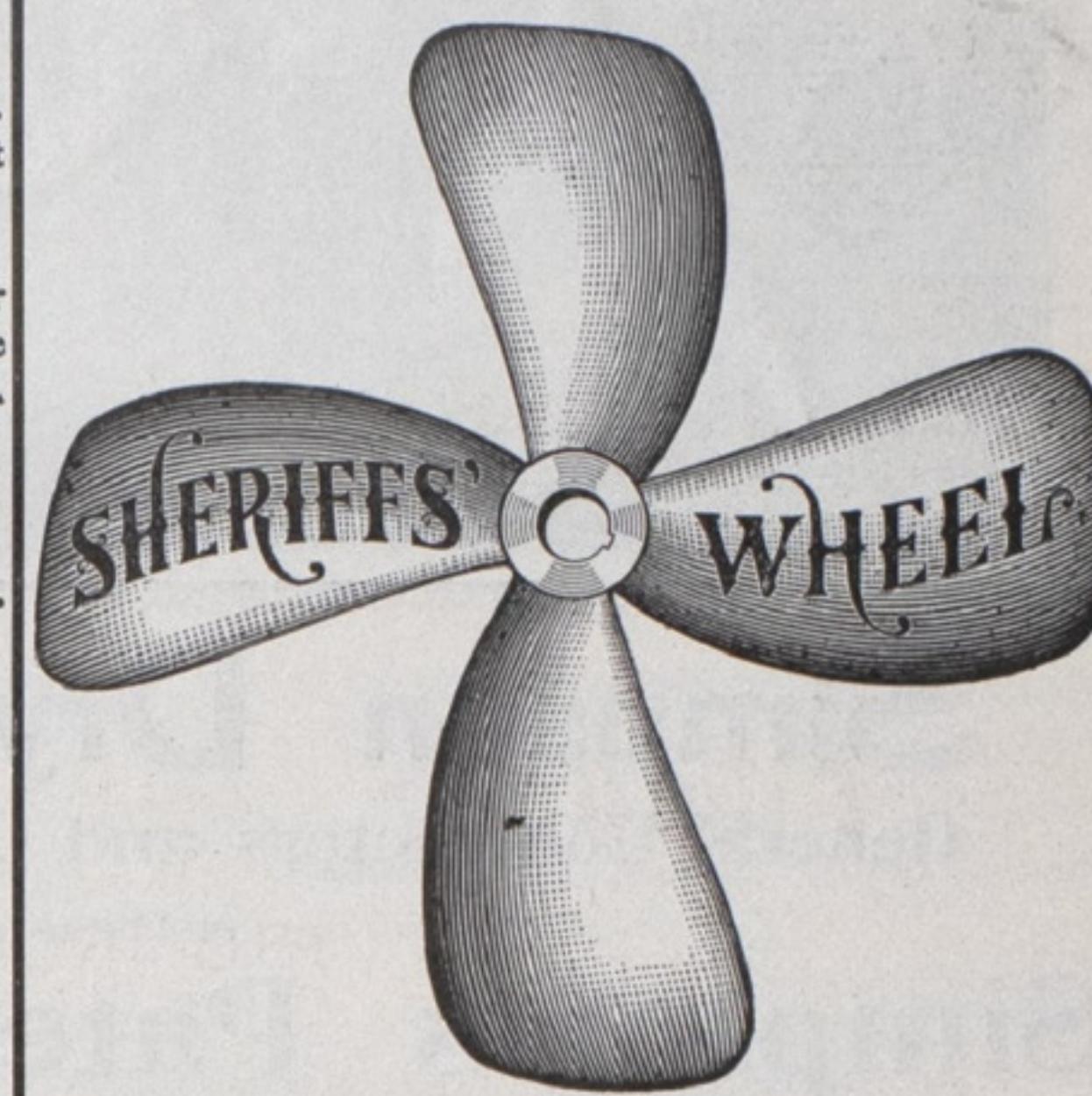
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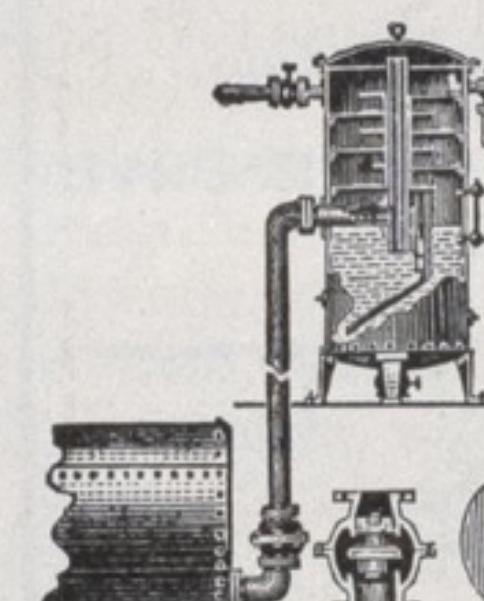
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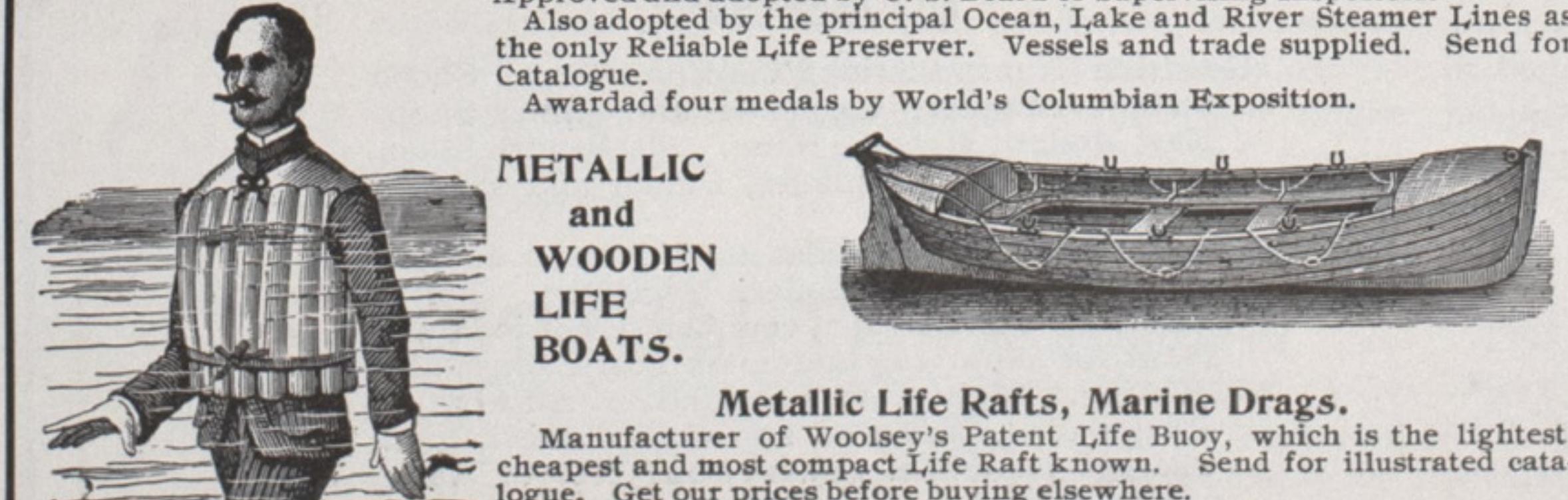
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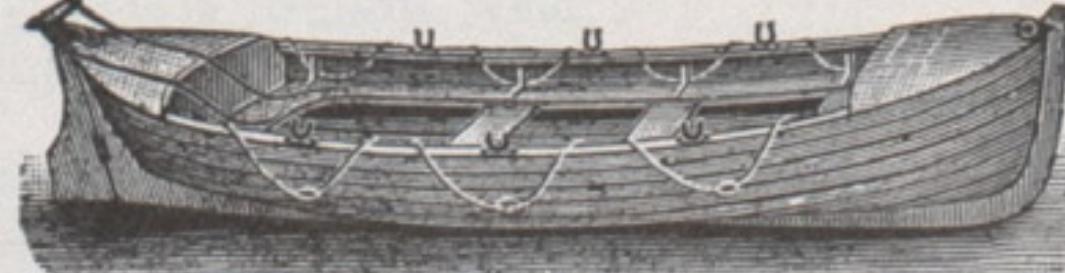
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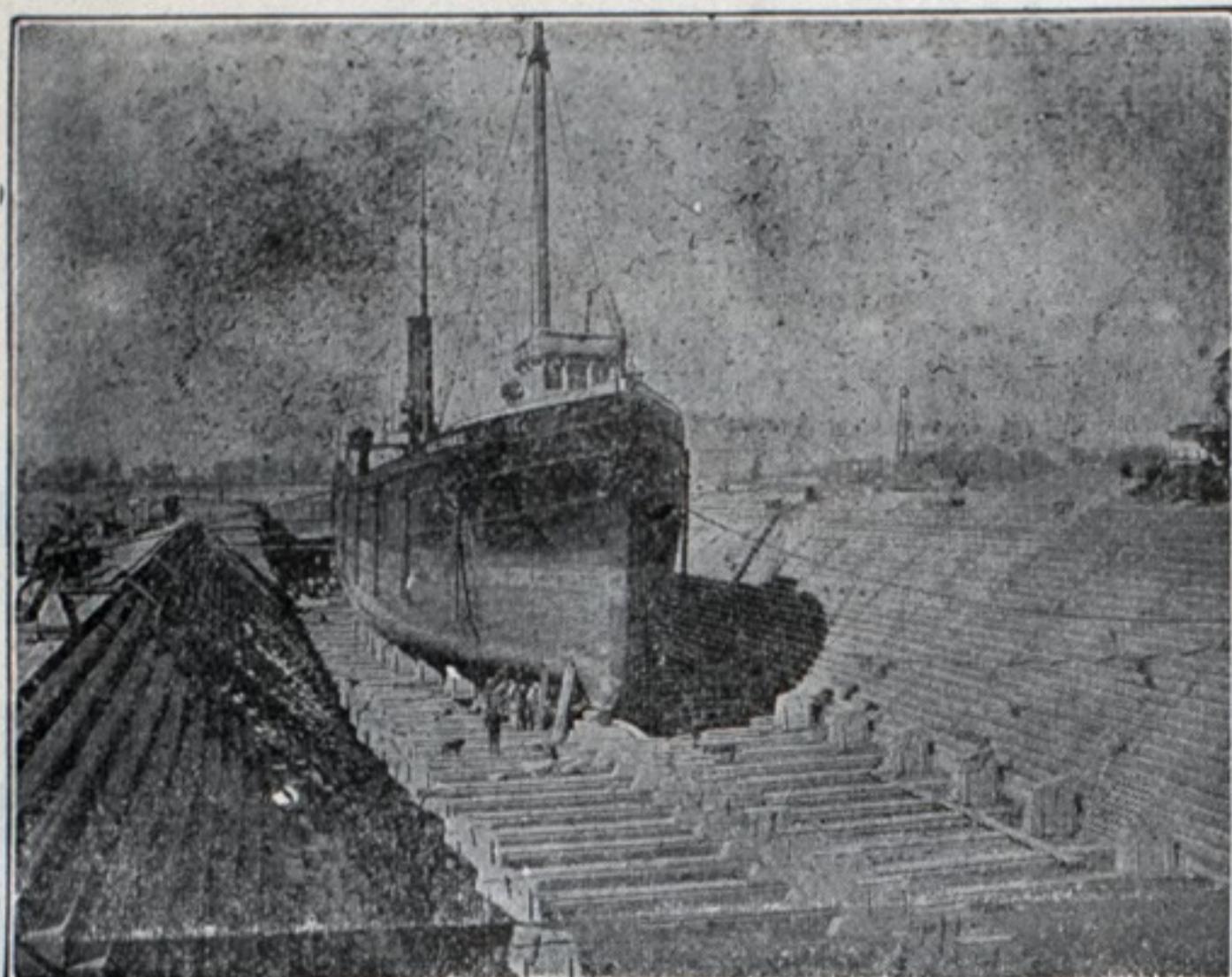


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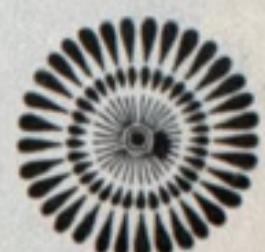
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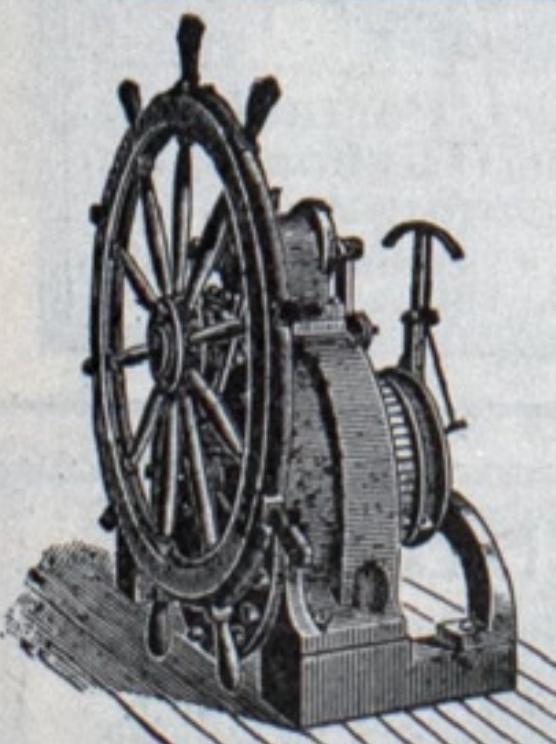
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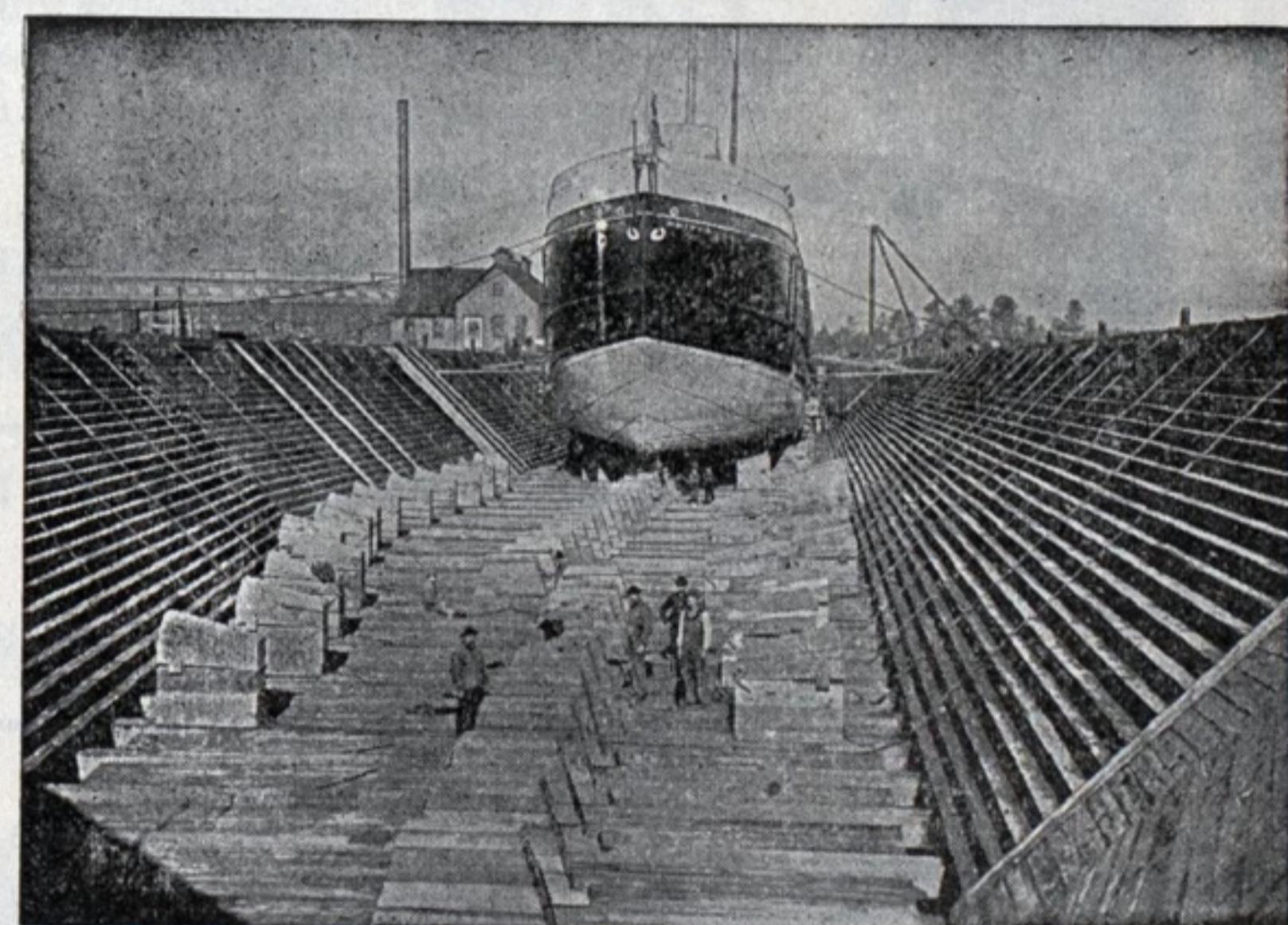
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